

Access DB# 91361

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: TRW, DVC Examiner #: 69332 Date: 4/11/03
Art Unit: 1711 Phone Number 308-2637 Serial Number: 09/991, 649
Mail Box and Bldg/Room Location: 31A29 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Formula of claim 19, derived from the method of claim 1.

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Ed</u>	NA Sequence (#) _____	STN <u>\$472.91</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>(7)</u>	Questel/Orbit <u>(abstracts)</u>
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: <u>4-15-03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>10</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>105</u>	Other _____	Other (specify) _____

=> file reg

FILE 'REGISTRY' ENTERED AT 11:46:24 ON 15 APR 2003
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FILE 'HCAPLUS' ENTERED AT 10:24:51 ON 15 APR 2003

L1 92 S KATHIRGAMANATHAN ?/AU
L2 4 S GANESHAMURUGAN ?/AU
L3 4 S L1 AND L2
SEL L3 1-4 RN

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L5 7 S L4 AND PMS/CI
L6 6 S L5 AND N/ELS
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L7 1 S E123
SEL L6 2 RN
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L20 STR

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L22 50 S L20 AND L21
L23 1094 S L20 AND L21 FUL
SAV L23 TRU649/A

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L24 STR L20

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L26 36699 S E3
E POLYOTHER/PCT
L27 209309 S E3
L28 93 S L25 AND (L26 OR L27)
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L33 STR

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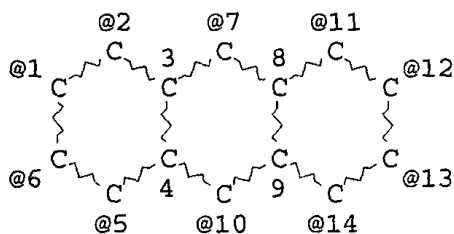
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L20 STR
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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 15

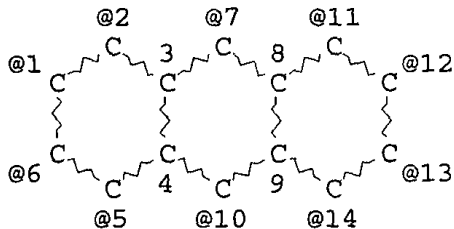
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L37 STR

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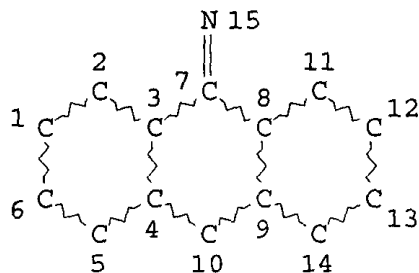
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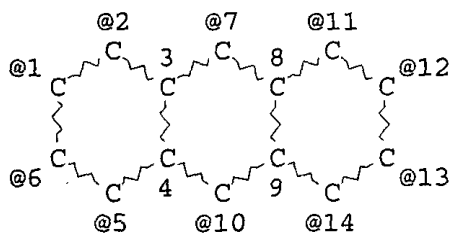
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SEARCH TIME: 00.00.01

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L20 STR

N@18



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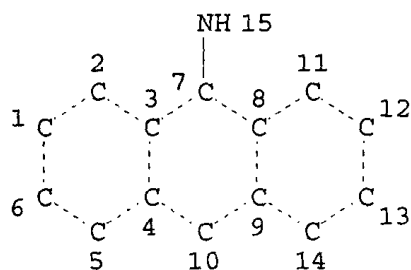
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STEREO ATTRIBUTES: NONE

L21 SCR 2043

L23 1094 SEA FILE=REGISTRY SSS FUL L20 AND L21

L45 STR



NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L47 25 SEA FILE=REGISTRY SUB=L23 SSS FUL L45 AND L21

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25 ANSWERS

SEARCH TIME: 00.00.01

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FILE 'HCAPLUS' ENTERED AT 11:46:58 ON 15 APR 2003

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=> 'd 153 1-7 cbib abs hitstr hitrn

L53 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS

2002:808364 Document No. 137:317943 Radiation absorbing polymer for anti-reflective coating in photolithography. Kang, Wen-Bing; Padmanaban, Munirathna; Tanaka, Hatsuyuki; Kimura, Ken; Kudo, Takanori; Pawlowski, Georg (Clariant Finance (BVI) Limited, Virgin I. (Brit.)). U.S. US 6468718 B1 20021022, 12 pp. (English). CODEN: USXXAM. APPLICATION: US 1999-244358 19990204.

AB The present invention relates to a radiation absorbing polymer having chem. bonded to a radiation absorbing dye, which has high absorption at a predetd. wavelength radiation, which shows good

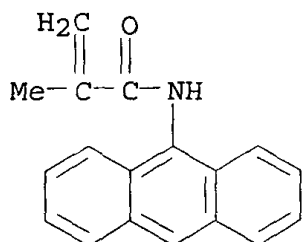
adhesion to a substrate and good thin film-forming, which has no dependence upon resists, which is sol. in a solvent for photoresists but becomes insol. after being baked. The present invention relates to a compn. for radiation absorbing coating contg. this polymer, and a radiation absorbing coating such as an anti-reflective coating formed from this compn. The radiation absorbing polymer comprises a copolymer contg. at least both a recurring unit composed of a monomer contg. a keto group and a divalent group (preferably a methylene group) in its side chain and a recurring unit composed of a monomer contg. an org. chromophore bonded directly or through a linkage group to the main chain. This radiation absorbing polymer is dissolved in a solvent such as alc., arom. hydrocarbon, ketone, ester, etc., and the resulting soln. is applied to a wafer and baked to form a radiation absorbing coating such as an anti-reflective coating. On this coating is coated, for example, a chem. amplified resist. This coated substrate is then exposed to deep UV rays and is developed to form a fine resist pattern excluding the influence of standing wave.

IT 471269-72-4P, Acetylacetoxyethyl methacrylate-1-methacryloylaminoanthracene copolymer
(radiation absorbing polymer for anti-reflective coating in photolithog.)
RN 471269-72-4 HCAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-9-anthracenyl-2-methyl-2-propenamide (9CI)
(CA INDEX NAME)

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CRN 471269-71-3

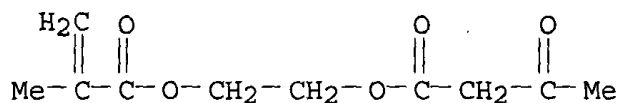
CMF C18 H15 N O



CM 2

CRN 21282-97-3

CMF C10 H14 O5



IT 471269-72-4P, Acetylacetoxyethyl methacrylate-1-methacryloylaminoanthracene copolymer
(radiation absorbing polymer for anti-reflective coating in photolithog.)

L53 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS
2002:540265 Document No. 137:94213 Polymers of diaminoanthracene and diiminoanthracene and use. Kathirgamanathan, Poopathy; Ganeshamurugan, Subramaniam (Nissan Chemical Industries Limited, Japan). U.S. Pat. Appl. Publ. US 2002095013 A1 20020718, 36 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-991649 20011126. PRIORITY: GB 2000-28973 20001128.

AB A homopolymer or copolymer or homo-oligomer or cooligomer product is obtained by condensation reaction of a (substituted) diaminoanthracene, optionally with a (substituted) diiminoanthracene in the absence of (substituted) anthraquinone.

IT 442199-37-3P, 9,10-Anthracenediamine homopolymer
442199-38-4P, Poly(imino-9,10-anthracenediyl)
442199-41-9P 442199-43-1P
(polymers of diaminoanthracene and diiminoanthracene)

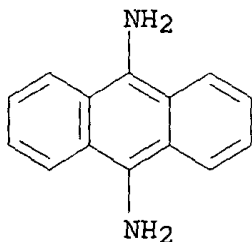
RN 442199-37-3 HCAPLUS

CN 9,10-Anthracenediamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

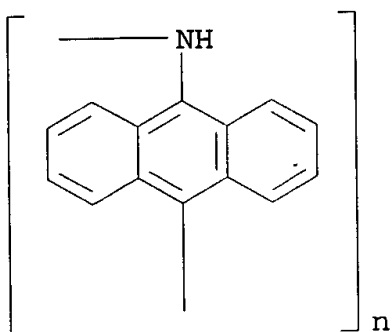
CRN 53760-37-5

CMF C14 H12 N2



RN 442199-38-4 HCAPLUS

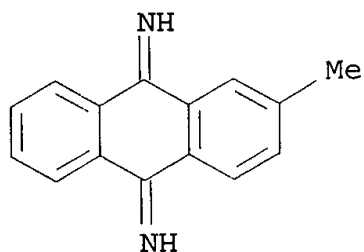
CN Poly(imino-9,10-anthracenediyl) (9CI) (CA INDEX NAME)



RN 442199-41-9 HCAPLUS
 CN 9,10-Anthracenediamine, polymer with 2-methyl-9,10-anthracenediimine
 (9CI) (CA INDEX NAME)

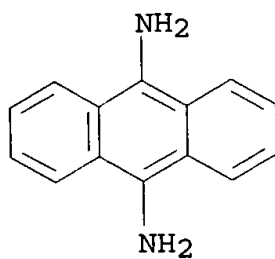
CM 1

CRN 442199-40-8
 CMF C15 H12 N2



CM 2

CRN 53760-37-5
 CMF C14 H12 N2



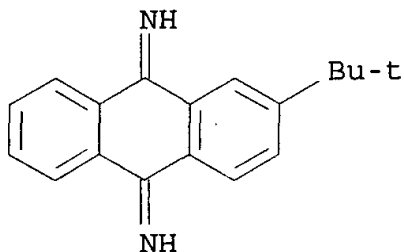
RN 442199-43-1 HCAPLUS

CN 9,10-Anthracenediamine, polymer with 2-(1,1-dimethylethyl)-9,10-anthracenediimine (9CI) (CA INDEX NAME)

CM 1

CRN 442199-42-0

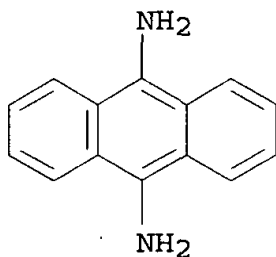
CMF C18 H18 N2



CM 2

CRN 53760-37-5

CMF C14 H12 N2



IT 442199-39-5P, 9,10-Diaminoanthracene-9,10-Dihydro-9,10-diiminoanthracene copolymer
(polymers of diaminoanthracene and diiminoanthracene)

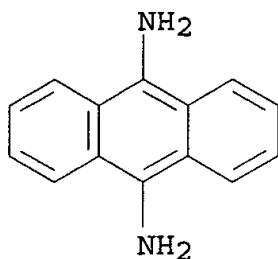
RN 442199-39-5 HCAPLUS

CN 9,10-Anthracenediamine, polymer with 9,10-anthracenediimine (9CI)
(CA INDEX NAME)

CM 1

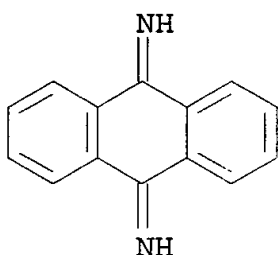
CRN 53760-37-5

CMF C14 H12 N2



CM 2

CRN 6932-20-3
CMF C14 H10 N2



- IT 442199-37-3P, 9,10-Anthracenediamine homopolymer
442199-38-4P, Poly(imino-9,10-anthracenediyl)
442199-41-9P 442199-43-1P
(polymers of diaminoanthracene and diiminoanthracene)
IT 442199-39-5P, 9,10-Diaminoanthracene-9,10-Dihydro-9,10-
diiminoanthracene copolymer
(polymers of diaminoanthracene and diiminoanthracene)

L53 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS

2000:882392 Document No. 134:178931 Complex formation of cyclodextrins with poly(propylene glycol) derivatives. Okada, Miyuko; Kawaguchi, Yoshinori; Okumura, Hiromichi; Kamachi, Mikiharu; Harada, Akira (Department of Macromolecular Science, Graduate School of Science, Osaka University, Osaka, 560-0043, Japan). Journal of Polymer Science, Part A: Polymer Chemistry, 38(Suppl.), 4839-4849 (English) 2000. CODEN: JPACEC. ISSN: 0887-624X. Publisher: John Wiley & Sons, Inc..

AB The complex formation between cyclodextrins (CDs) and poly(propylene glycol) (PPG) derivs. is described. .beta.-CD and .gamma.-CD formed complexes with PPG derivs. such as 1-naphthyl (1NA), 2-naphthyl (2NA), 3,5-dinitrobenzoyl, and 2,4-dinitrophenyl PPG. .alpha.-CD did not form complexes with these PPG derivs. Although .gamma.-CD gave complexes with 9-anthryl PPG (PPG9An), .beta.-CD did not efficiently form complexes with PPG9An. .beta.-CD did not form

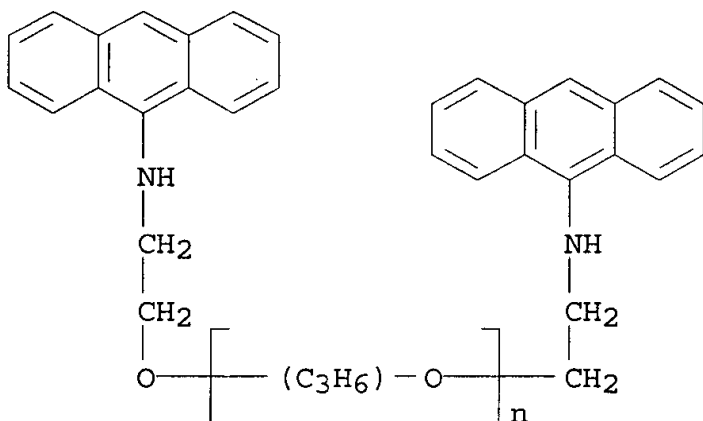
complexes with trityl PPG, demonstrating that trityl groups were too bulky to thread a .beta.-CD cavity. The emission spectra of the complexes showed that .beta.-CD bound a single 2NA moiety in its cavity and that .gamma.-CD included two 2NA moieties. In contrast, .gamma.-CD bound a single 1NA moiety in the cavity. X-ray diffraction studies and ¹H NMR anal. showed that the CD mols. were stocked along a PPG chain to form a channel structure. The inclusion modes are discussed.

IT 209617-27-6P

(prepn. and complexation with cyclodextrins)

RN 209617-27-6 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[2-(9-anthracenylamino)methylethyl]-.omega.-[2-(9-anthracenylamino)methylethoxy]- (9CI) (CA INDEX NAME)



2 (D1-Me)

IT 325970-15-8P

(pseudorotaxane; prepn. and characterization of)

RN 325970-15-8 HCAPLUS

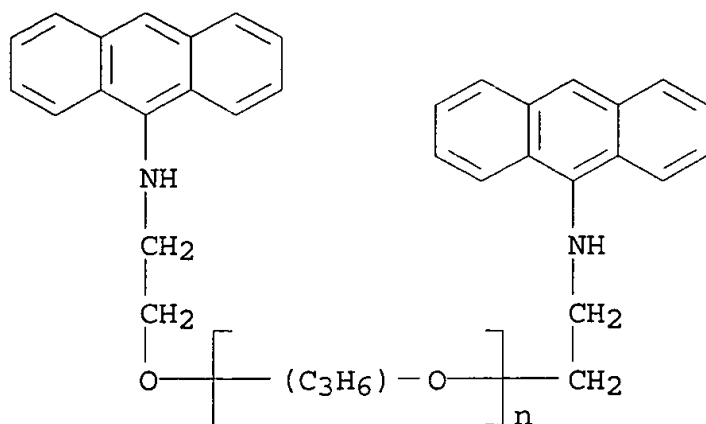
CN .gamma.-Cyclodextrin, rotaxane compd. with .alpha.-[2-(9-anthracenylamino)methylethyl]-.omega.-[2-(9-anthracenylamino)methylethoxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI)
(CA INDEX NAME)

CM 1

CRN 209617-27-6

CMF (C3 H6 O)_n C34 H32 N2 O

CCI IDS, PMS

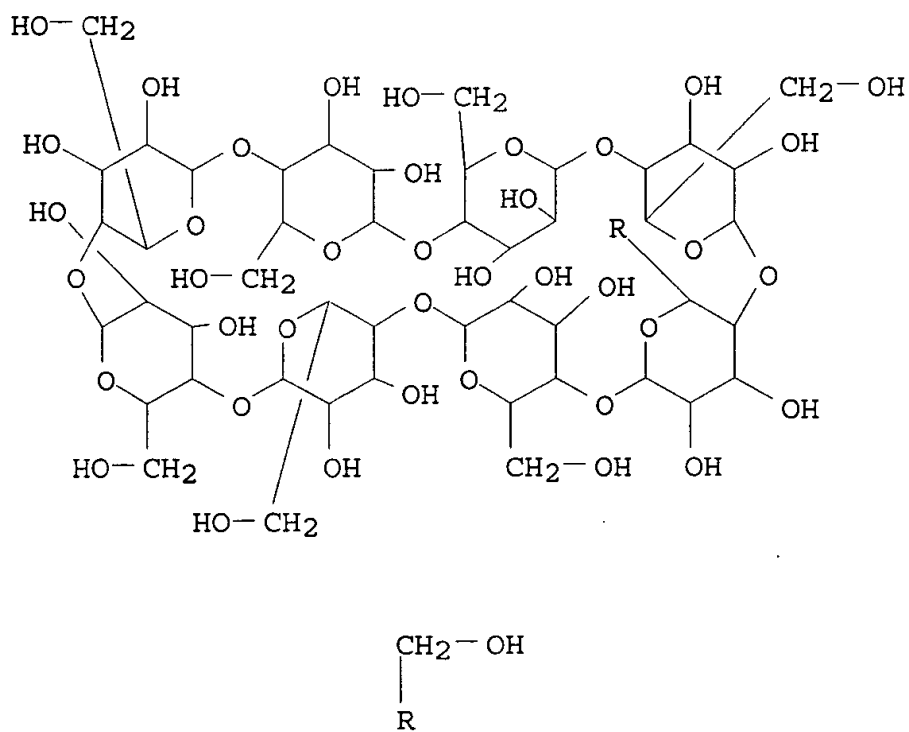


2 (D1-Me)

CM 2

CRN 17465-86-0

CMF C48 H80 O40



IT 209617-27-6P

(prepn. and complexation with cyclodextrins)

IT 325970-15-8P

(pseudorotaxane; prepn. and characterization of)

L53 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS

2000:873330 Document No. 134:29824 Polymers from anthraquinone and aromatic diamine. Kathirgamanathan, Poopathy; Surendrakumar, Sivagnanasundram (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000344885 A2 20001212, 28 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-164813 20000601. PRIORITY: GB 1999-12841 19990602.

AB Title elec. conductive polymer is prepd. from (substituted) anthraquinone and (substituted) anthracenediamine.

IT 312494-33-0P 312494-34-1P 312494-35-2P

312494-36-3P 312494-37-4P 312494-38-5P

312494-39-6P 312494-40-9P 312494-41-0P

312494-42-1P

(polymers from anthraquinone and arom. diamine)

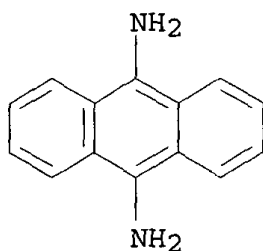
RN 312494-33-0 HCAPLUS

CN 9,10-Anthracenedione, polymer with 9,10-anthracenediamine (9CI) (CA INDEX NAME)

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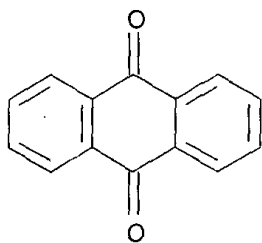
CMF C14 H12 N2



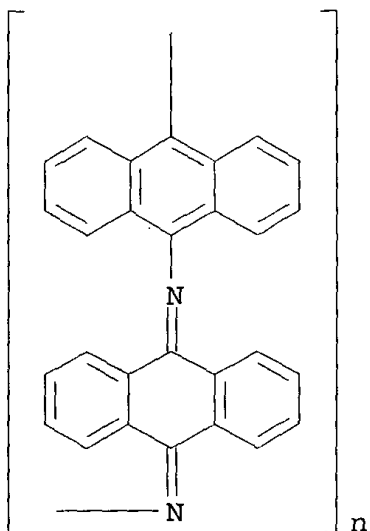
CM 2

CRN 84-65-1

CMF C14 H8 O2



RN	312494-34-1	HCAPLUS
CN	Poly(nitrilo-9,10-anthracenediylidenenitrilo-9,10-anthracenediyl) (9CI) (CA INDEX NAME)	



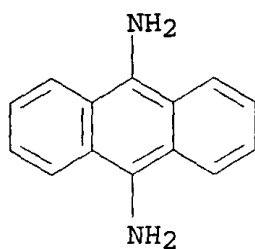
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RN      312494-35-2   HCAPLUS
CN      9,10-Anthracenedione, 2-(1,1-dimethylethyl)-, polymer with
        9,10-anthracenediamine (9CI)   (CA INDEX NAME)

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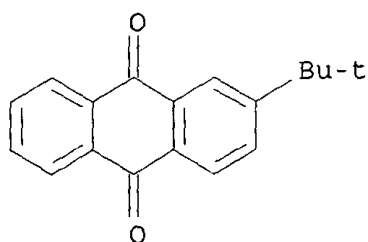
CRN 53760-37-5
CMF C14 H12 N2



CM 2

CRN 84-47-9

CMF C18 H16 O2



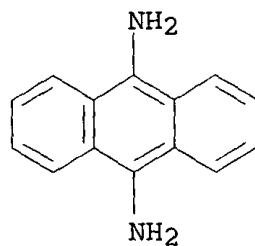
RN 312494-36-3 HCAPLUS

CN 9,10-Anthracenedione, 2-methyl-, polymer with 9,10-anthracenediamine
(9CI) (CA INDEX NAME)

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CRN 53760-37-5

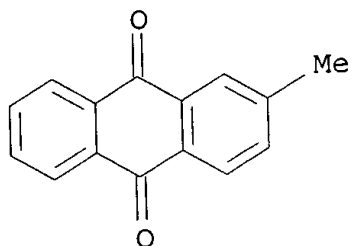
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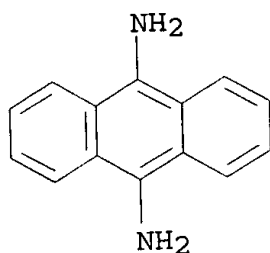
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RN 312494-37-4 HCAPLUS
 CN 9,10-Anthracenedione, 2,3-dimethyl-, polymer with
 9,10-anthracenediamine (9CI) (CA INDEX NAME)

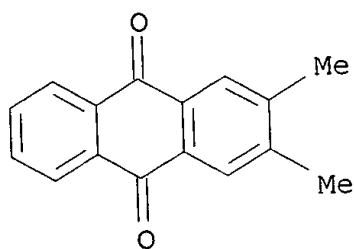
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CRN 53760-37-5
 CMF C14 H12 N2



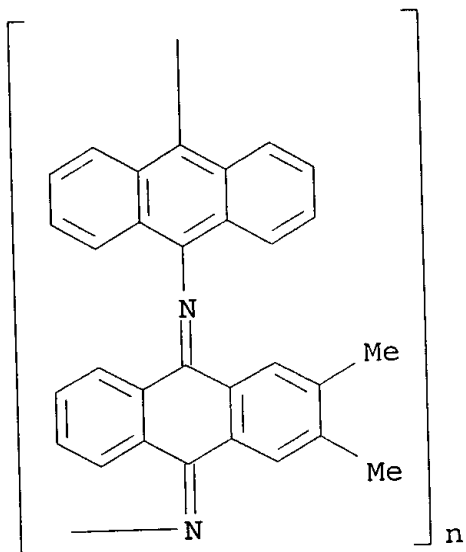
CM 2

CRN 6531-35-7
 CMF C16 H12 O2



RN 312494-38-5 HCAPLUS
 CN Poly[nitrilo(2,3-dimethyl-9,10-anthracenediylidene)nitrilo-9,10-

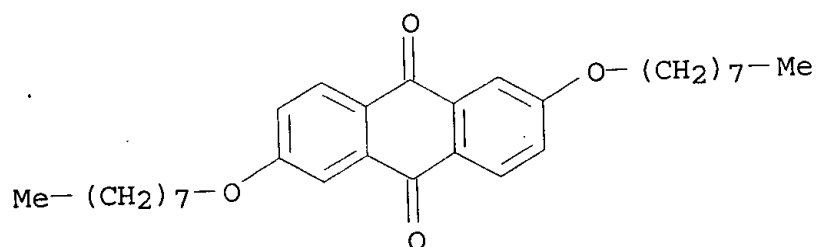
anthracenediyl] (9CI) (CA INDEX NAME)



RN 312494-39-6 HCAPLUS
 CN 9,10-Anthracenedione, 2,6-bis(octyloxy)-, polymer with
 9,10-anthracenediamine (9CI) (CA INDEX NAME)

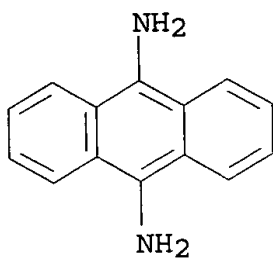
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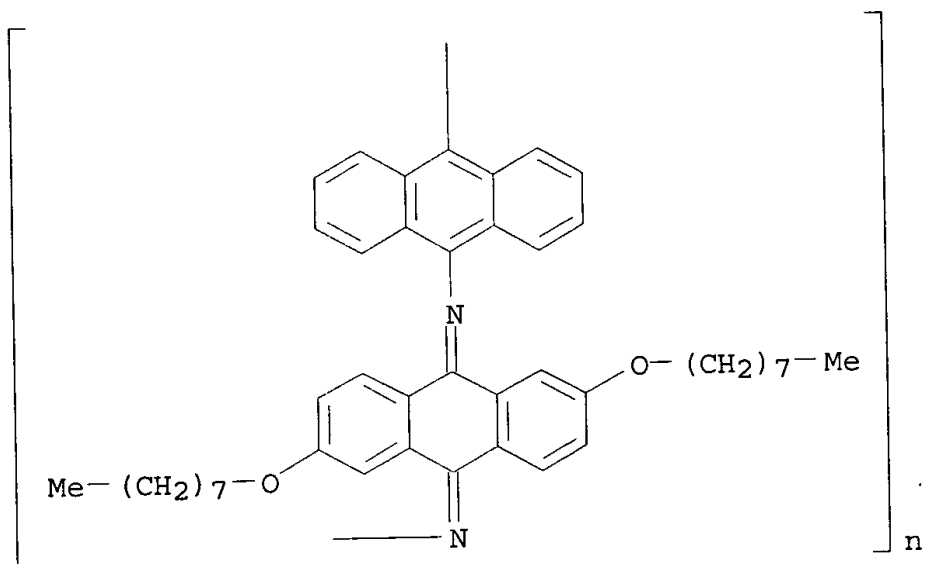


CM 2

CRN 53760-37-5
 CMF C14 H12 N2



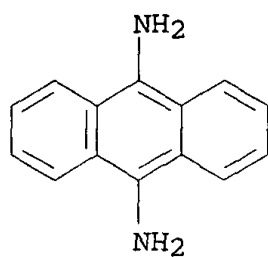
RN 312494-40-9 HCAPLUS
 CN Poly[nitrilo[2,6-bis(octyloxy)-9,10-anthracenediylidene]nitrilo-9,10-anthracenediyl] (9CI) (CA INDEX NAME)



RN 312494-41-0 HCAPLUS
 CN 9,10-Anthracenedione, 2,6-dihydroxy-, polymer with 9,10-anthracenediamine (9CI) (CA INDEX NAME)

CM 1

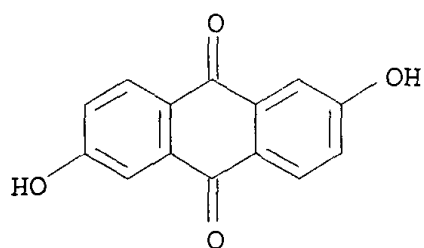
CRN 53760-37-5
 CMF C14 H12 N2



CM 2

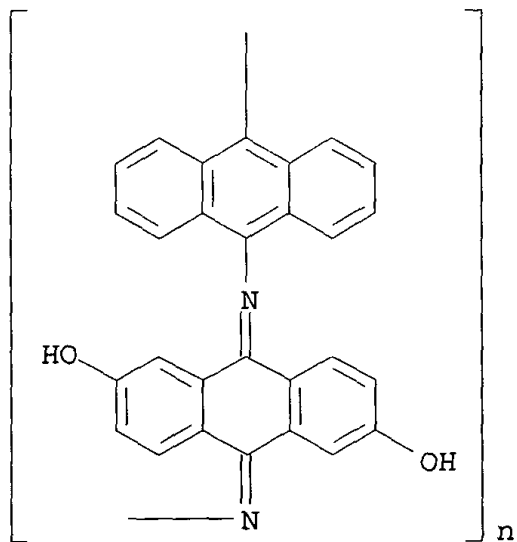
CRN 84-60-6

CMF C14 H8 O4



RN 312494-42-1 HCAPLUS

CN Poly[nitrilo(2,6-dihydroxy-9,10-anthracenediylidene)nitrilo-9,10-anthracenediyl] (9CI) (CA INDEX NAME)



IT 312494-33-0P 312494-34-1P 312494-35-2P
312494-36-3P 312494-37-4P 312494-38-5P
312494-39-6P 312494-40-9P 312494-41-0P
312494-42-1P

(polymers from anthraquinone and arom. diamine)

L53 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS

1999:375300 Document No. 131:19485 Transparent conducting
poly(9-aminoanthracene) polymers and their manufacture.

Kathirgamanathan, Poopathy; Surendrakumar, Sivagnanasundram (Nissan
Chemical Industries, Limited, Japan). Eur. Pat. Appl. EP 921147 A2
19990609, 50 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR,
GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO.

(English). CODEN: EPXXDW. APPLICATION: EP 1998-309512 19981120.
PRIORITY: GB 1997-25648 19971203; GB 1997-25649 19971203; GB
1997-25650 19971203.

AB The polymers in various oxidn. states which are free or
substantially free of anthraquinone, are manufd. by the aerial
oxidn. or electropolymn. Also disclosed are certain substituted
9-aminoanthracene compds., their polymers and copolymers with
aniline. Thus, adding 5% NH₃ to 9-aminoanthracene hydrochloride
while stirring to a pH 1.5-2.0 over 15 min, to a pH of 5.8-6.0 for 3
h and to pH of 8.5-9.0 gave a yellow solid which was filtered and
worked up to give a polymer with elec. cond. 1.3×10^{-3} to 8.5×10^{-4}
S/cm.

IT 226240-33-1P

(manuf. of transparent conducting poly(9-aminoanthracene)
polymers)

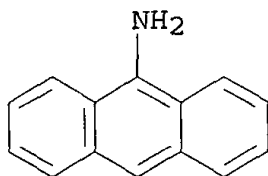
RN 226240-33-1 HCAPLUS

CN 9-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 779-03-3

CMF C14 H11 N



IT 226240-20-6P 226240-23-9P 226240-26-2P
226240-28-4P

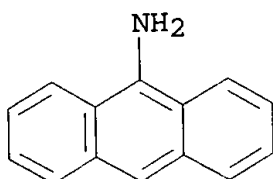
(transparent conducting poly(9-aminoanthracene) polymers and
their manuf.)

RN 226240-20-6 HCAPLUS

CN 9-Anthracenamine, hydrochloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 209743-32-8
CMF C14 H11 N . Cl H

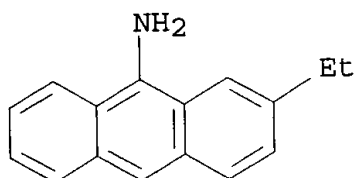


● HCl

RN 226240-23-9 HCAPLUS
CN 9-Anthracenamine, 2-ethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

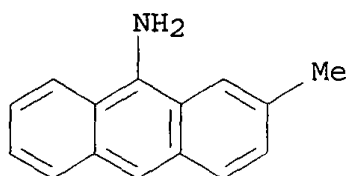
CRN 226240-22-8
CMF C16 H15 N



RN 226240-26-2 HCAPLUS
CN 9-Anthracenamine, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

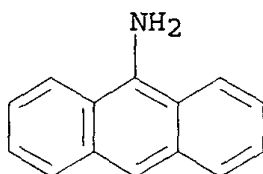
CRN 226240-25-1
CMF C15 H13 N



RN 226240-28-4 HCAPLUS
 CN 9-Anthracenamine, polymer with benzenamine (9CI) (CA INDEX NAME)

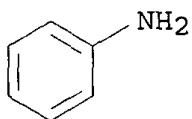
CM 1

CRN 779-03-3
 CMF C14 H11 N



CM 2

CRN 62-53-3
 CMF C6 H7 N



IT 226240-33-1P
 (manuf. of transparent conducting poly(9-aminoanthracene)
 polymers)
 IT 226240-20-6P 226240-23-9P 226240-26-2P
 226240-28-4P
 (transparent conducting poly(9-aminoanthracene) polymers and
 their manuf.)

L53 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS
 1998:383155 Document No. 129:95898 Inclusion complexes of chain
 molecules with cycloamyloses. III. Molecular dynamics simulations of
 polyrotaxanes formed by polypropylene glycol and
 .beta.-cyclodextrins. Pozuelo, Javier; Mendicuti, Francisco;

Mattice, Wayne L. (Departamento de Quimica Fisica, Universidad de Alcala, Madrid, Spain). Polymer Journal (Tokyo), 30(6), 479-484 (English) 1998. CODEN: POLJB8. ISSN: 0032-3896. Publisher: Society of Polymer Science, Japan.

AB Mol. dynamics simulations were performed in vacuo on channel type polyrotaxanes composed of .beta.-cyclodextrins (.beta.CDs) threaded onto isotactic and syndiotactic poly(propylene glycol) (PPG). In the most stable complex, the .beta.CDs form a close-packed structure from one end of the PPG chain to the other. Non-bonded van der Waals interactions between .beta.CD and PPG are the main source of stabilization of the complex. Head-to-head and tail-to-tail orientation of successive .beta.CDs in the complex is more favorable than a head-to-tail orientation, due to intermol. hydrogen bonding between head-to-head .beta.CD units. .beta.CDs in polyrotaxanes adopt a more rigid and sym. macro-ring conformation than does an isolated .beta.CD. Formation of the polyrotaxane is accompanied by an increase in the no. of trans states at the bonds in the backbone of PPG. For this reason, the PPG chain in the polyrotaxane is much more extended than the unperturbed chain.

IT 209617-28-7, .beta.-Cyclodextrin rotaxane compd. with 9-anthracenamine end-capped poly(propylene glycol)
209689-15-6, 9-Anthracenamine end-capped isotactic poly(propylene glycol) rotaxane compd. with .beta.-cyclodextrin
209689-17-8, 9-Anthracenamine end-capped syndiotactic poly(propylene glycol) rotaxane compd. with .beta.-cyclodextrin
(mol. dynamics simulation of orientation and conformation of rotaxanes of poly(propylene glycol) and .beta.-cyclodextrins)

RN 209617-28-7 HCAPLUS

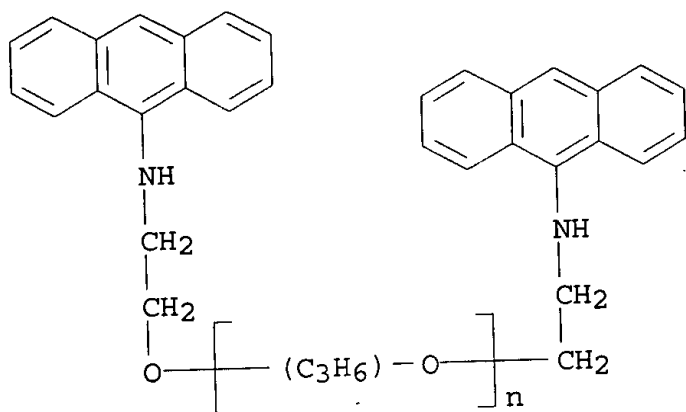
CN .beta.-Cyclodextrin, rotaxane compd. with .alpha.-[2-(9-anthracenylamino)methylethyl]-.omega.-[2-(9-anthracenylamino)methylethoxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI)
(CA INDEX NAME)

CM 1

CRN 209617-27-6

CMF (C3 H6 O)_n C34 H32 N2 O

CCI IDS, PMS



2 (D1-Me)

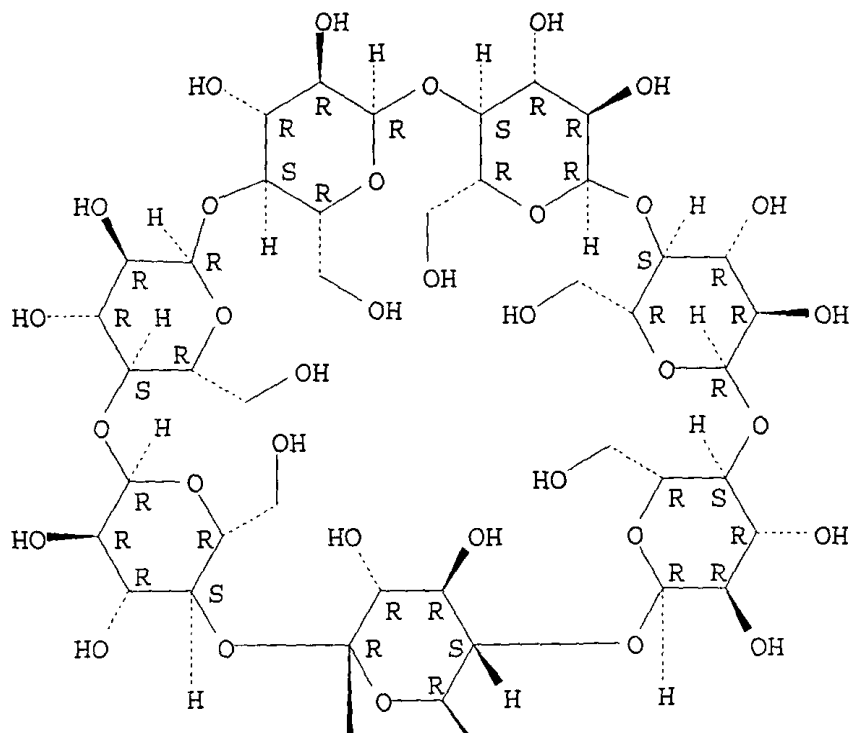
CM 2

CRN 7585-39-9

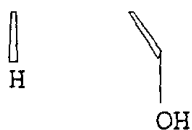
CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



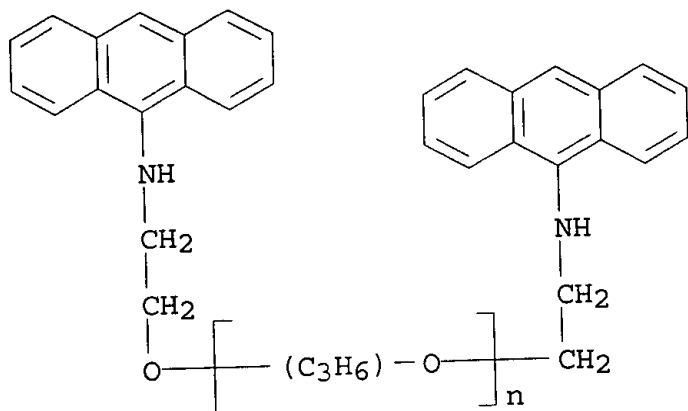
PAGE 2-A



RN 209689-15-6 HCAPLUS
 CN .beta.-Cyclodextrin, rotaxane compd. with isotactic
 .alpha.-[2-(9-anthracenylamino)methylethyl]-.omega.-[2-(9-
 anthracenylamino)methylethoxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI)
 (CA INDEX NAME)

CM 1

CRN 209689-14-5
 CMF (C3 H6 O)_n C34 H32 N2 O
 CCI IDS, PMS



2 (D1-Me)

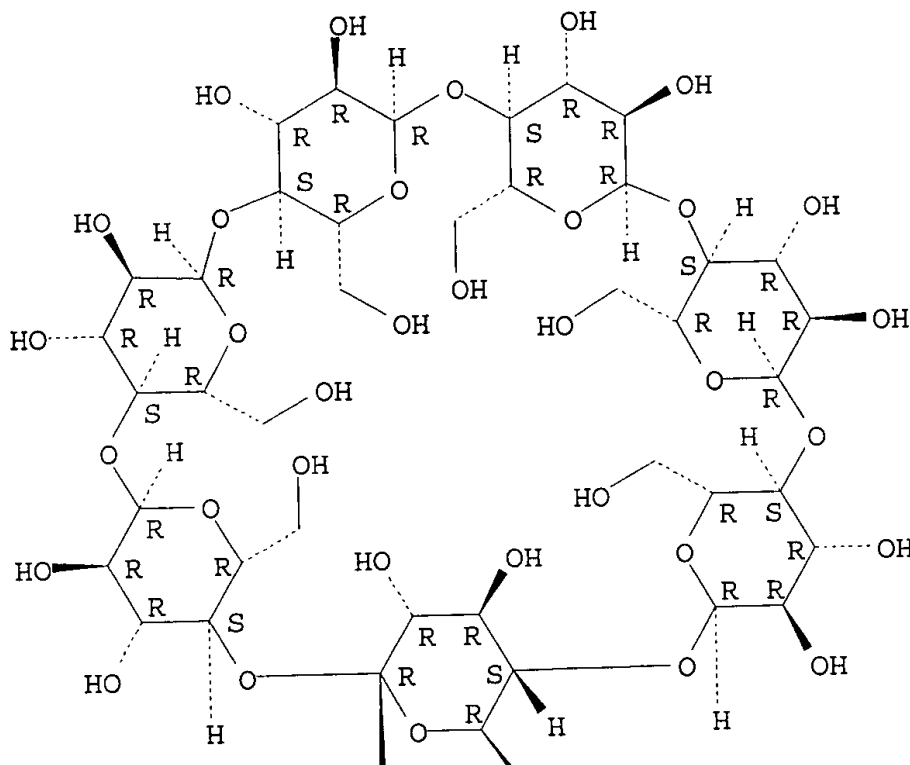
CM 2

CRN 7585-39-9

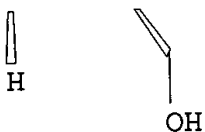
CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



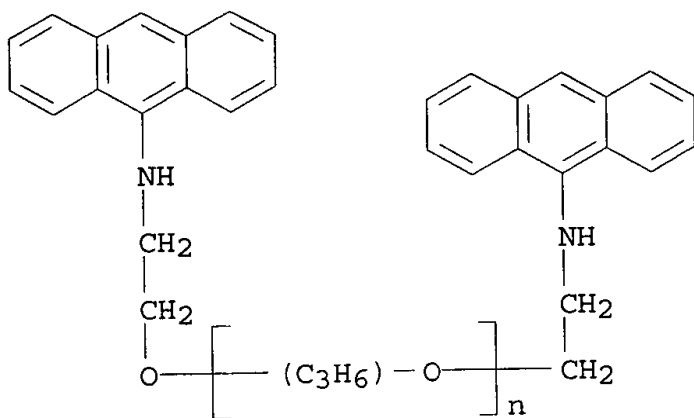
PAGE 2-A



RN 209689-17-8 HCAPLUS
 CN .beta.-Cyclodextrin, rotaxane compd. with syndiotactic
 .alpha.-[2-(9-anthracenylamino)methylethyl]-.omega.-[2-(9-
 anthracenylamino)methylethoxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI)
 (CA INDEX NAME)

CM 1

CRN 209689-16-7
 CMF (C3 H6 O)n C34 H32 N2 O
 CCI IDS, PMS



2 (D1-Me)

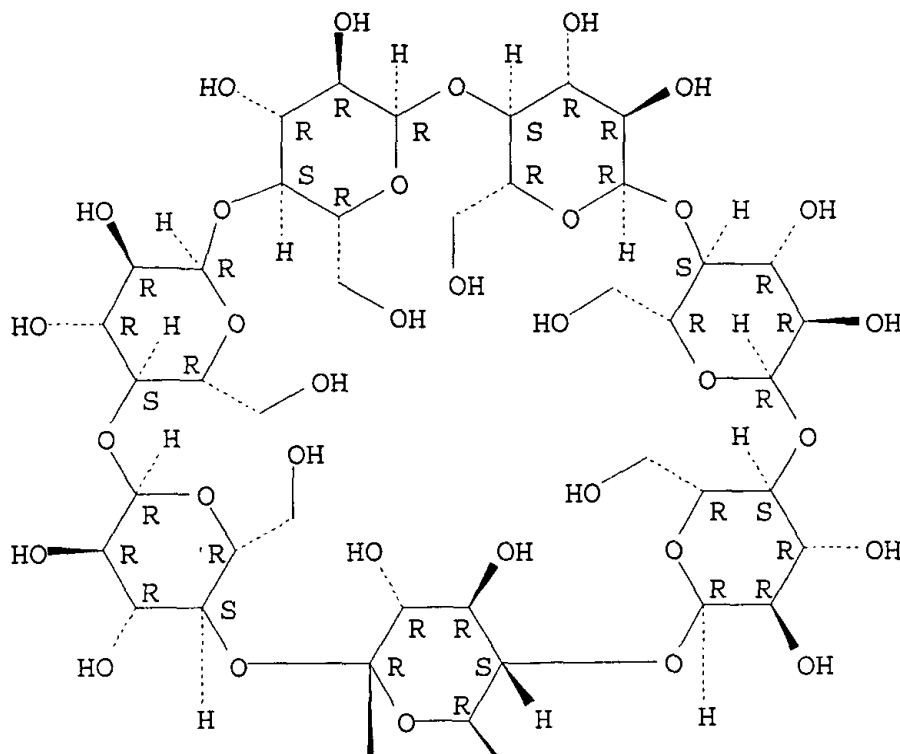
CM 2

CRN 7585-39-9

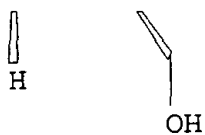
CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



IT 209617-28-7, .beta.-Cyclodextrin rotaxane compd. with
 9-anthracenamine end-capped poly(propylene glycol)
 209689-15-6, 9-Anthracenamine end-capped isotactic
 poly(propylene glycol) rotaxane compd. with .beta.-cyclodextrin
 209689-17-8, 9-Anthracenamine end-capped syndiotactic
 poly(propylene glycol) rotaxane compd. with .beta.-cyclodextrin
 (mol. dynamics simulation of orientation and conformation of
 rotaxanes of poly(propylene glycol) and .beta.-cyclodextrins)

L53 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS
 1979:576923 Document No. 91:176923 Polyisothiocyanates. Drobnica,
 Ludovit; Augustin, Jozef; Gemeiner, Peter; Nemec, Pavol; Kristian,
 Pavol (Czech.). Czech. CS 176652 19790115, 4 pp. (Slovak). CODEN:

CZXXA9. APPLICATION: CS 1975-652 19750203.

AB C1-2 aminoalkyl ethers of cellulose react with diisothiocyanates SCNRNCS [R = p-xylylene, 1,4-naphthylenedimethylene, phenylene, 9,10-anthrylene, 9,10-anthrylenedimethylene, p-C₆H₄CH₂, 1,4-naphthylenemethylene, 3,6-acridinediyl, or p-C₆H₄XC₆H₄-p where X = CH₂, O, S, CH:CH, N:N, or direct bond] in Me₂SO, pyridine, DMF, or trialkylamines at 40-70.degree. to give cellulose ethers (I) contg. reactive (CH₂)_nNHC(S)NHRNCS groups (600-900 .mu.equiv NCS/g). I are used to prep. chromatog. thin layers, and as packing for chromatog. columns. Thus, adding 1 g p-phenylene diisothiocyanate to 5 g cellulose 2-aminoethyl ether (1 .mu.equiv amino group/g) suspended in 50 mL Me₂SO, heating to 60.degree., sepg. after 4 h, washing, and drying gave an ether thiourea isothiocyanate deriv. [71124-32-8] contg. 2.0% N and 3.5% S.

IT 71124-47-5P

(prepn. of, for use in thin-layer and column chromatog.)

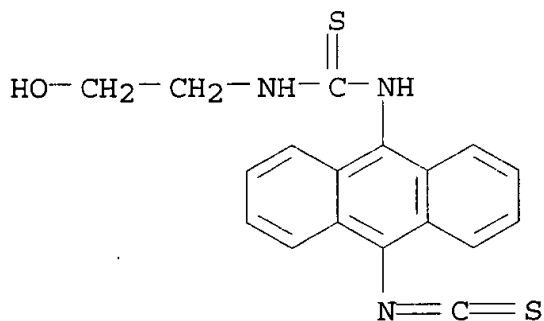
RN 71124-47-5 HCAPLUS

CN Cellulose, 2-[[[(10-isothiocyanato-9-anthracenyl)amino]thioxomethyl]amino]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 170481-17-1

CMF C18 H15 N3 O S2



CM 2

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 71124-47-5P

(prepn. of, for use in thin-layer and column chromatog.)

=> d 154 1-20 cbib abs hitstr hitrn

L54 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1999:101359 Document No. 130:202116 Synthesis and electrochemical response of poly(1-aminoanthracene) films. Faria, R. C.; Bulhoes, L. O. S. (Laboratorio Interdisciplinar de Eletroquimica e Cerdmica, Departamento de Quimica, Universidade Federal de Sao Carlos, Sao Carlos, 13565-905, Brazil). Electrochimica Acta, 44(10), 1597-1605 (English) 1999. CODEN: ELCAAV. ISSN: 0013-4686. Publisher: Elsevier Science Ltd..

AB The electrooxidn. of 1-aminoanthracene on platinum electrodes was studied in acetonitrile using different supporting electrolytes by cycling the electrode potential in different potential ranges. The addn. of pyridine to the electrolytic soln. results in an increase in the c.d. leading to an enhancement in the growth rate of the polymeric film. Electrogravimetric measurements were performed to det. the polymn. efficiency. No defined structure was obsd. in the newly grown film, however a fiber-like structure was defined after several voltammetric cycles in aq. soln. The film was characterized by IR spectroscopy, and the films prepd. under different conditions presented a well-defined electrochem. response. The electrochem. response can be characterized by a redox couple the shape of which depends on the electrolyte used in the polymer synthesis. Marked differences in the response and charge d. can be obsd. in the voltammetric curves for the different polymers.

IT 53161-99-2P, Poly(1-aminoanthracene)
(electrosynthesis and electrochem. response of
poly(aminoanthracene) films)

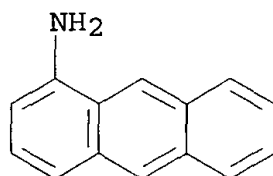
RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



IT 53161-99-2P, Poly(1-aminoanthracene)
(electrosynthesis and electrochem. response of
poly(aminoanthracene) films)

L54 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1998:738398 Document No. 130:75400 Hydrogen ion selective electrode based on poly(1-aminoanthracene) film. Faria, R. C.; Bulhoes, L. O. S. (Departamento de Quimica, Universidade Federal de Sao Carlos, Sao Carlos, 13565-905, Brazil). Analytica Chimica Acta, 377(1), 21-27

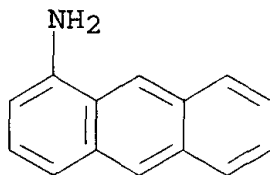
(English) 1998. CODEN: ACACAM. ISSN: 0003-2670. Publisher: Elsevier Science B.V..

- AB Poly(1-aminoanthracene) films were electropolymd. on Pt electrodes. The potentiometric response of these electrodes prepd. under different exptl. conditions was analyzed, and the polymeric film prepd. without pyridine showed a better response as a pH sensor than that prepd. in the presence of pyridine. The electrodes showed an apparent Nernstian response in the 1-12 pH range, with a slope of 52.5 mV/decade. The electrodes prepd. from 10 mM 1-aminoanthracene in MeCN with 0.1M Bu₄NClO₄ as the supporting electrolyte showed performance superior to the other electrodes tested. An important result from the pH detns. is that for the poly(1-aminoanthracene) electrodes no interference was obsd. in the solns. contg. different alk. ions.
- IT 53161-99-2, Poly(1-aminoanthracene)
(hydrogen ion selective electrode based on poly(1-aminoanthracene) film)
- RN 53161-99-2 HCAPLUS
- CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



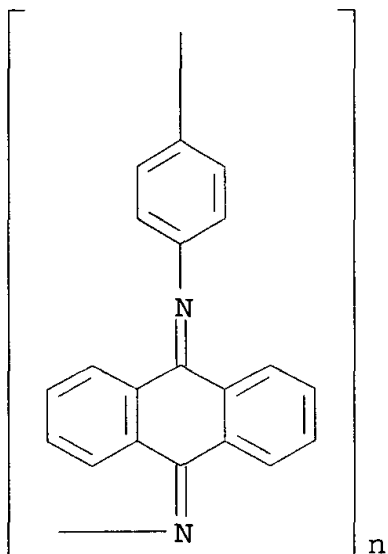
- IT 53161-99-2, Poly(1-aminoanthracene)
(hydrogen ion selective electrode based on poly(1-aminoanthracene) film)

L54 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1996:244861 Document No. 124:318101 Reduction studies of polyquinone diimines. Boone, Harold W.; Padias, Anne Buyle; Hall, H. K., Jr. (Department Chemistry, University Arizona, Tucson, AZ, 85721, USA). Polymer Preprints (American Chemical Society, Division of Polymer Chemistry), 37(1), 676-7 (English) 1996. CODEN: ACPPAY. ISSN: 0032-3934. Publisher: American Chemical Society, Division of Polymer Chemistry.

- AB The redn. of polyquinone diimines, prepd. by condensation of anthraquinone and p-phenylenediamine, was studied using model compds. and the corresponding polymers. The polymn. gives the dibenzo analog of pernigraniline base polyaniline; when reduced, the novel anthracene contg. leucoemeraldine base polyaniline analogs are formed.

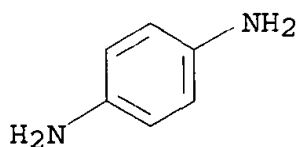
IT 65680-91-3, Anthraquinone-p-phenylenediamine copolymer sru
 65681-04-1, Anthraquinone-p-phenylenediamine copolymer
 (redn. studies of polyquinone diimines)
 RN 65680-91-3 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
 (CA INDEX NAME)



RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

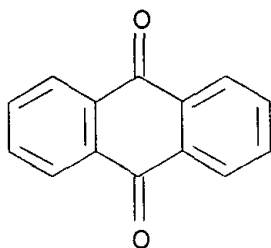
CM 1

CRN 106-50-3
 CMF C6 H8 N2



CM 2

CRN 84-65-1
 CMF C14 H8 O2



IT 65680-91-3, Anthraquinone-p-phenylenediamine copolymer sru
65681-04-1, Anthraquinone-p-phenylenediamine copolymer
(redn. studies of polyquinone diimines)

L54 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1995:580523 Document No. 122:315442 Electroconductive polymers of polycyclic aromatic amines and their manufacture. Yamamoto, Ryuichi; Bun, Tokei (Tosoh Corp, Japan; Yamamoto Ryuichi). Jpn. Kokai Tokkyo Koho JP 06316631 A2 19941115 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-265529 19920909.

AB Polycyclic arom. amines, such as aminonaphthalene, aminoanthracene, aminoquinoline, and aminoisoquinoline, are polymn. oxidatively by reacting with a peroxide, such as H₂O₂, in the presence of a transition-metal catalyst. These polymers are sol. in solvents, transparent in visible range, and have good electrocond.

IT 53161-99-2P

(electroconductive polymers of polycyclic arom. amines and their manuf.)

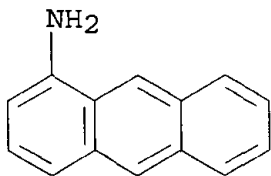
RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



IT 53161-99-2P

(electroconductive polymers of polycyclic arom. amines and their manuf.)

L54 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1995:518809 Document No. 122:267680 Making polymer moldings electrically conductive. Myata, Seizo; Yamamoto, Ryuichi; Hasegawa,

Masazumi; Myaki, Yoshuki (Tosoh Corp, Japan; Myata Seizo; Yamamoto Ryuichi). Jpn. Kokai Tokkyo Koho JP 06340754 A2 19941213 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-265528 19920909.

AB The title process involves treating a dielec. polymer molding with a polynuclear arom. amine compd. by adhesion or impregnation then contacting with an oxidizing agent for the oxidative polymn. of the amine compds. A rigid PVC film was immersed in a soln. of 1-aminonaphthalene in hexane-acetone, air-dried, immersed in a soln. of FeCl₃ and p-toluenesulfonic acid in MeCN-MeOH for 3 min, washed with MeOH, and dried in vacuo to obtain a film with surface resistance 1 M.OMEGA./square.

IT 53161-99-2P, 1-Aminoanthracene polymer
(making polymer moldings elec. conductive)

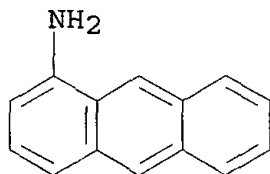
RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



IT 53161-99-2P, 1-Aminoanthracene polymer
(making polymer moldings elec. conductive)

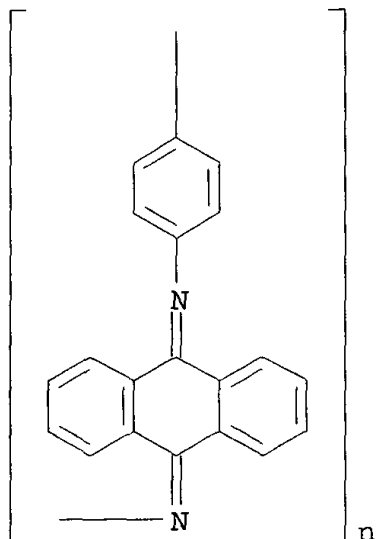
L54 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1995:283812 Document No. 122:32212 Novel Polyaromatic Quinone Imines. Hall, H. K., Jr.; Padias, Anne Buyle; Williams, Paul A.; Gosau, Jan-Michael; Boone, Harold W.; Park, Dong-Kyu (Department of Chemistry, University of Arizona, Tucson, AZ, 85721, USA). Macromolecules, 28(1), 1-8 (English) 1995. CODEN: MAMOBX. ISSN: 0024-9297. Publisher: American Chemical Society.

AB A novel synthetic route to poly(quinone imines) was developed. Reaction of anthraquinone (AQ) with arom. diamines in the presence of titanium tetrachloride and 1,4-diazabicyclo[2.2.2]octane (Dabco) as base in refluxing chloro- or o-dichlorobenzene led to high-mol.-wt. polymers with the poly(quinone diimine) structure. Polymn. of AQ with methylene-4,4'-dianiline resulted in a mixt. of high-mol.-wt. polymer (Mw 15 000) and oligomeric macrocycles. The polymn. of AQ was also accomplished with 4,4'-oxy- and 4,4'-thiodianiline, as well as with p-phenylenediamine. The latter polymer is the dibenzo analog of the pernigraniline base form of polyaniline. Tert-butylanthraquinone was also successfully used as

a comonomer with the various arom. diamines. All these polymers are red in color, sol. in org. solvents, and film-forming. Polymns. of the arom. diamines with heterocyclic-substituted benzoquinones, such as benzo[1,2-b:4,5-b']dithiophene-4,8-dione, 2,2'-dialkylbenzo[1,2-d:5,4-d']dioxazole-4,8-dione, and N,N',2,2'-tetraalkylbenzo[1,2-d:5,4-d']imidazole-4,8-dione, were also investigated.

IT 65680-91-3P, Anthraquinone-p-phenylenediamine copolymer, sru
 65681-04-1P, Anthraquinone-p-phenylenediamine copolymer
 104389-28-8P, Anthraquinone-4,4'-methylenedianiline
 copolymer, sru 104425-98-1P, Anthraquinone-4,4'-
 methylenedianiline copolymer
 (prepn. and characterization of arom. poly(quinone imines))
 RN 65680-91-3 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
 (CA INDEX NAME)

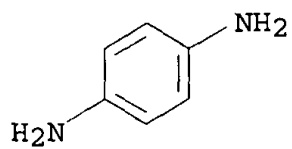


RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

CM 1

CRN 106-50-3

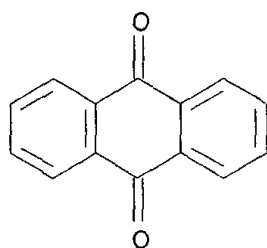
CMF C6 H8 N2



CM 2

CRN 84-65-1

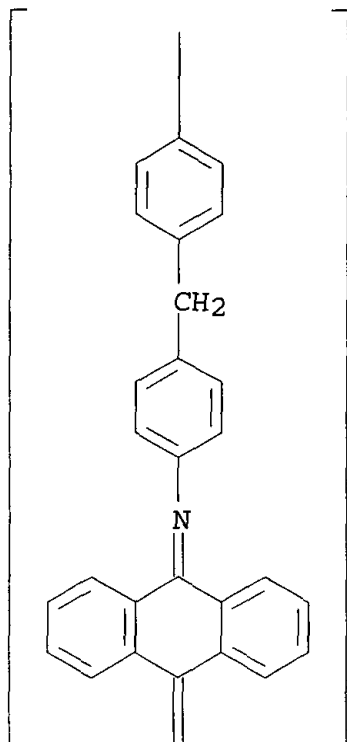
CMF C14 H8 O2



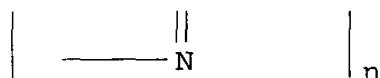
RN 104389-28-8 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylenemethylene-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

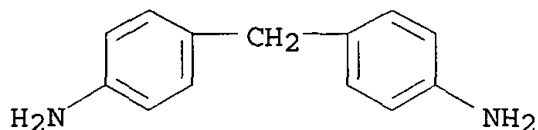


RN 104425-98-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 4,4'-methylenebis[benzenamine]
 (9CI) (CA INDEX NAME)

CM 1

CRN 101-77-9

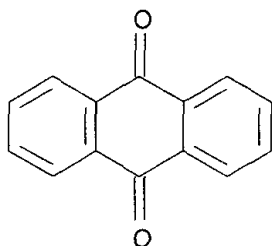
CMF C13 H14 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



IT 65680-91-3P, Anthraquinone-p-phenylenediamine copolymer, sru
 65681-04-1P, Anthraquinone-p-phenylenediamine copolymer
 104389-28-8P, Anthraquinone-4,4'-methylenedianiline
 copolymer, sru 104425-98-1P, Anthraquinone-4,4'-
 methylenedianiline copolymer
 (prepn. and characterization of arom. poly(quinone imines))

L54 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1995:51121 Document No. 122:188309 On the chemical polymerization of
 some aromatic amines. Simionescu, Cristofor I.; Cianga, Ioan;
 Farcas, Aura ("P. Poni" Institute of Macromolecular Chemistry, Iasi,
 6600, Rom.). Revue Roumaine de Chimie, 39(3), 333-9 (English) 1994.
 CODEN: RRCHAX. ISSN: 0035-3930.

AB The synthesis of three electroactive polymers, poly(1-
 naphthylamine), poly(1-aminoanthracene) and poly(2-aminoanthracene),
 from chem. oxidn. of the corresponding monomers, in the presence of
 K2S2O8 with simultaneous doping with HCl, is described. The
 influence of aryl group on polymer properties, as compared to those
 of polyaniline, is discussed. Oxidn. degree and elec. cond. are
 decreased and thermal stability is increased with increasing aryl
 group size.

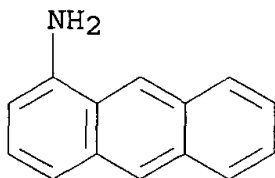
IT 53161-99-2P, 1-Anthracenamine homopolymer
 156097-98-2P, 2-Anthracenamine homopolymer
 (chem. oxidative polymn. of arom. amines)

RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

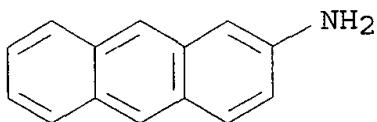
CRN 610-49-1
CMF C14 H11 N



RN 156097-98-2 HCAPLUS
CN 2-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 613-13-8
CMF C14 H11 N



IT 53161-99-2P, 1-Anthracenamine homopolymer
156097-98-2P, 2-Anthracenamine homopolymer
(chem. oxidative polymn. of arom. amines)

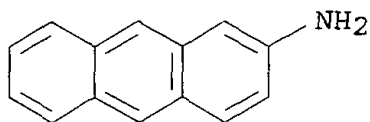
L54 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2003 ACS
1994:448182 Document No. 121:48182 Preparation of a conductive polymer film. Kaneko, Takehira; Suzuki, Hirofumi; Matsui, Nobuo; Yagihara, Tomio; Higashida, Shiro; Nakada, Akira; Matsumoto, Hitoshi; Shimizu, Takeo (Nippon Soda Co., Ltd., Japan). U.S. US 5306443 A 19940426, 18 pp. Cont. of U.S. Ser. No. 329,425, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1990-588586 19900926. PRIORITY: US 1989-329425 19890327.

AB By the selective use of a homogeneous stable precursor soln. in which no polymn. reactions immediately occur and which contains arom. compds. such as pyrrole, thiophene, arom. amines or their derivs., oxidizing agents, and solvents, as a precursor soln. of conductive polymer film, a homogeneous and tough conductive polymer film can be obtained when the precursor soln. is cast on a substrate and the solvents are evapd.

IT 156097-98-2
(elec. conductive, prepn. of films of)

RN 156097-98-2 HCAPLUS
CN 2-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 613-13-8
CMF C14 H11 N

IT 156097-98-2

(elec. conductive, prepn. of films of)

L54 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2003 ACS
1993:650634 Document No. 119:250634 Synthesis of poly(1-aminonaphthalene) and poly(1-aminoanthracene) by chemical oxidative polymerization and characterization of the polymers. Moon, Doo Kyung; Osakada, Kohtaro; Maruyama, Tsukasa; Kubota, Kenji; Yamamoto, Takakazu (Res. Lab. Resour. Util., Tokyo Inst. Technol., Yokohama, 227, Japan). Macromolecules, 26(25), 6992-7 (English) 1993. CODEN: MAMOBX. ISSN: 0024-9297.

AB Poly(1-aminonaphthalene) (I) and poly(1-aminoanthracene) (II) are synthesized in high yields (90-96%) by chem. oxidative polymn. of the resp. monomers using H₂O₂ in the presence of FeSO₄ catalyst. The oxidative polymn. of the monomers proceeds via successive coupling that gives a polymer structure similar to polyaniline. The polymers are brown powders and sol. in DMSO, DMF, N-methyl-2-pyrrolidone (NMP), H₂SO₄, and HCO₂H. I and II show elec. conductivities of 1.7 .times. 10⁻⁶ and 1.6 .times. 10⁻⁴ S.cntdot.cm⁻¹, resp., which increase to 3.8 .times. 10⁻⁴ - 1.5 .times. 10⁻³ S.cntdot.cm⁻¹ on doping with HCl or iodine. Light scattering measurement of the polymers in NMP shows a large degree of depolarization (.rho.v = 0.33), indicating that the polymers have a linear and stiff structure. The no.-av. mol. wts. of I and II are 4300 and 4500, resp., with narrow mol.-wt. distribution by gel-permeation chromatog. (vs. polystyrene). The wt.-av. mol. wt. of II detd. by the light scattering method is 7000. ¹H NMR spectra of I and II in DMSO-d₆ give rise to the absorption of the NH hydrogen in the region of .delta. 5-6 ppm, and the NH hydrogen of I is exchangeable with the other hydrogen contained in DSO-d₆ on the NMR time scale with an activation energy of 27 kJ mol⁻¹. I and II do not show a distinct absorption peak in the visible region.

IT 53161-99-2, Poly(1-aminoanthracene)
(oxidative prepn. and characterization of)

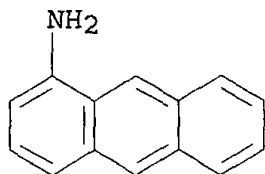
RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



IT 53161-99-2, Poly(1-aminoanthracene)
(oxidative prepn. and characterization of)

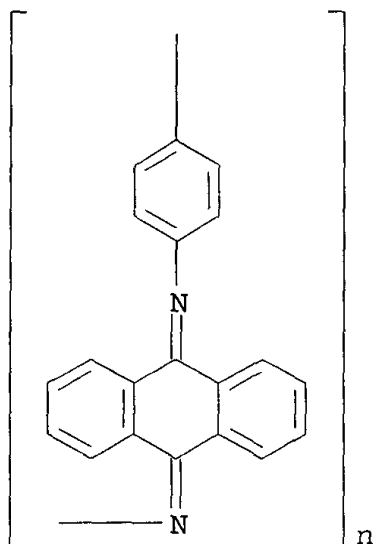
L54 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2003 ACS
1993:581387 Document No. 119:181387 New polyaromatic quinone imines
from anthraquinone. Williams, Paul A.; Ellzey, Kenneth A.; Padias,
Anne Buyle; Hall, H. K., Jr. (Carl S. Marvel Lab., Univ. Arizona,
Tucson, AZ, 85721, USA). Macromolecules, 26(21), 5820-1 (English)
1993. CODEN: MAMOBX. ISSN: 0024-9297.

AB A novel condensation polymn. to prep. fully conjugated
poly(arylanthraquinoneimines) from anthraquinone and arom. diamines
in the presence of TiCl₄ and Dabco is described. Sol., film-forming
polymers with mol. wts. .ltoreq.20,000 were prepd.

IT 65680-91-3P, Anthraquinone-p-phenylenediamine copolymer, SRU
65681-04-1P, Anthraquinone-p-phenylenediamine copolymer
104389-28-8P, Anthraquinone-4,4'-methylenedianiline
copolymer, SRU 104425-98-1P, Anthraquinone-4,4'-
methylenedianiline copolymer
(prepn. and characterization of)

RN 65680-91-3 HCAPLUS

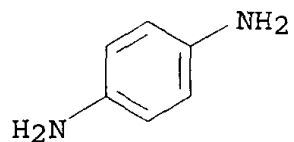
CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
(CA INDEX NAME)



RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

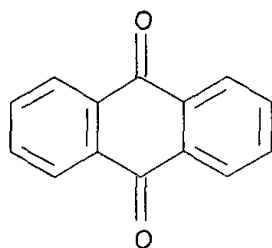
CM 1

CRN 106-50-3
 CMF C6 H8 N2



CM 2

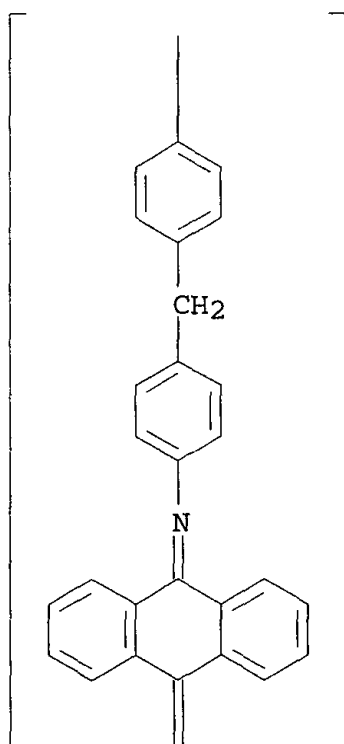
CRN 84-65-1
 CMF C14 H8 O2



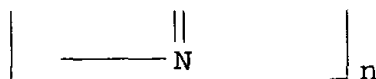
RN 104389-28-8 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylenemethylene-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



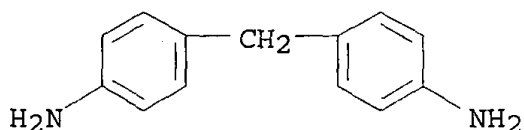
PAGE 2-A



RN 104425-98-1 HCAPLUS
CN 9,10-Anthracenedione, polymer with 4,4'-methylenebis[benzenamine]
(9CI) (CA INDEX NAME)

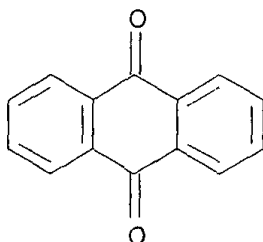
CM 1

CRN 101-77-9
CMF C13 H14 N2



CM 2

CRN 84-65-1
CMF C14 H8 O2



IT 65680-91-3P, Anthraquinone-p-phenylenediamine copolymer, SRU
65681-04-1P, Anthraquinone-p-phenylenediamine copolymer
104389-28-8P, Anthraquinone-4,4'-methylenedianiline
copolymer, SRU 104425-98-1P, Anthraquinone-4,4'-
methylenedianiline copolymer
(prepn. and characterization of)

L54 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1992:580450 Document No. 117:180450 The use of a scanning tunneling microscope to estimate film thickness and conductivity of an electrochemically produced poly-1-aminoanthracene film. Yang, Hongjun; Fan, Fu Ren F.; Yau, Shueh Lin; Bard, Allen J. (Dep. Chem. Biochem., Univ. Texas, Austin, TX, 78712, USA). Journal of the Electrochemical Society, 139(8), 2182-5 (English) 1992. CODEN: JESQAN. ISSN: 0013-4651.

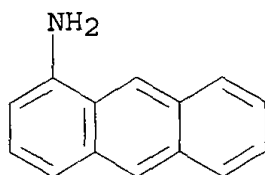
AB An electronically conductive poly-1-aminoanthracene (PAA) film was prepd. electrochem. on Pt, Au, and C substrates by cycling the potential between -0.40 and +0.80 V in MeCN/Bu4NPF6 solns. Adding

pyridine to the soln. resulted in a marked increase in the growth rate of the polymer film, as indicated by a large increase in the faradaic current. A new scanning tunneling microscopy (STM) approach is also presented to det. film thickness and film cond. through measuring the tip current vs. tip displacement. In this approach, the tip excursion between its initial contact with the polymer film and its contact with the Pt substrate is a measure of film thickness. A comparison of the STM current-displacement behavior in the poly-1-aminoanthracene film to that of a polypyrrole film relates to film cond. The PAA film was .apprx.1 order of magnitude less conductive than was polypyrrole.

IT 53161-99-2, Poly(1-aminoanthracene)
(electrochem. prepn. and morphol. and thickness detn. of film of,
by scanning tunneling microscopy)
RN 53161-99-2 HCAPLUS
CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1
CMF C14 H11 N



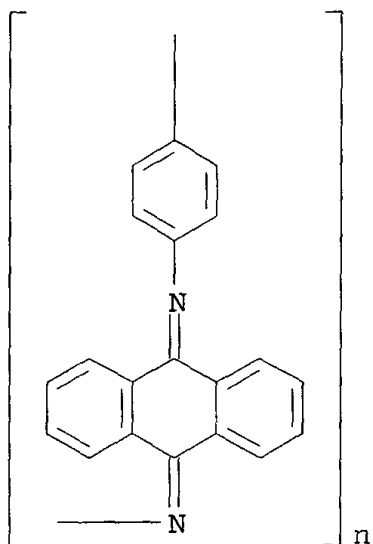
IT 53161-99-2, Poly(1-aminoanthracene)
(electrochem. prepn. and morphol. and thickness detn. of film of,
by scanning tunneling microscopy)

L54 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2003 ACS
1989:615021 Document No. 111:215021 Synthesis and properties of
semiconducting aromatic polyquinone diimines [Erratum to document
cited in CA105(16):134434q]. Everaerts, A.; Roberts, Sue; Hall, H.
K., Jr. (Dep. Chem., Univ. Arizona, Tucson, AZ, 85721, USA).
Journal of Polymer Science, Part A: Polymer Chemistry, 27(10), 3531
(English) 1989. CODEN: JPACEC. ISSN: 0887-624X.

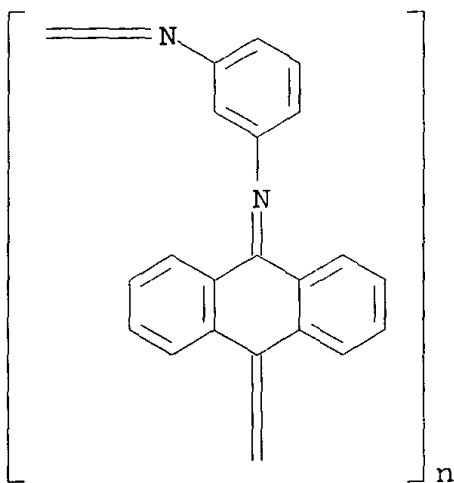
AB An error in the synthesis of 2-octoxy-p-phenylenediamine has been
cor. The error was not reflected in the abstr. or the index
entries.

IT 65680-91-3P 65680-97-9P 65681-01-8P
65681-04-1P 104389-27-7P 104389-28-8P
104425-98-1P
(prepn. and elec. cond. of (Erratum))

RN 65680-91-3 HCAPLUS
CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
(CA INDEX NAME)



RN 65680-97-9 HCAPLUS
 CN Poly(nitrilo-1,3-phenylenenitrilo-9,10-anthracenediylidene) (9CI)
 (CA INDEX NAME)

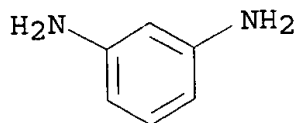


RN 65681-01-8 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,3-benzenediamine (9CI) (CA
 INDEX NAME)

CM 1

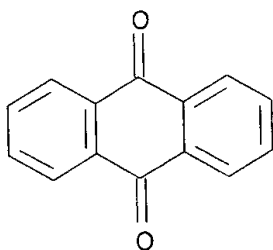
CRN 108-45-2

CMF C6 H8 N2



CM 2

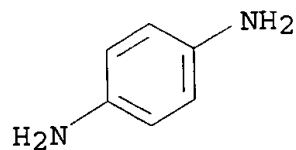
CRN 84-65-1
CMF C14 H8 O2



RN 65681-04-1 HCAPLUS
CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
INDEX NAME)

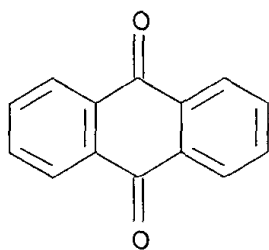
CM 1

CRN 106-50-3
CMF C6 H8 N2



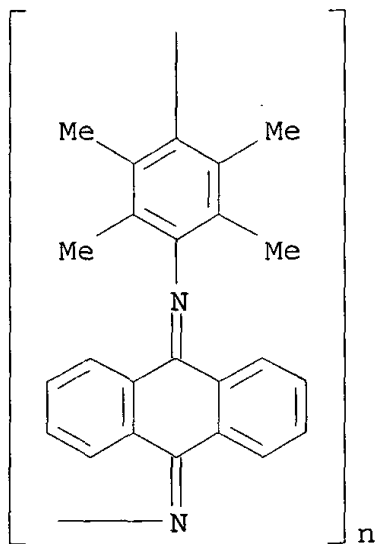
CM 2

CRN 84-65-1
CMF C14 H8 O2



RN 104389-27-7 HCAPLUS

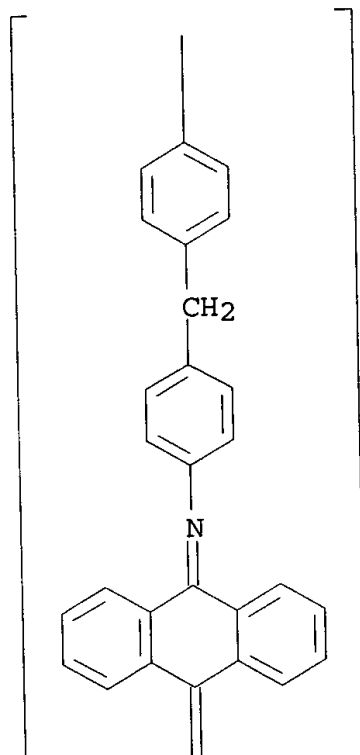
CN Poly[nitrilo-9,10-anthracenediylidenenitrilo(2,3,5,6-tetramethyl-1,4-phenylene)] (9CI) (CA INDEX NAME)



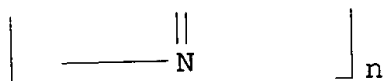
RN 104389-28-8 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylenemethylene-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



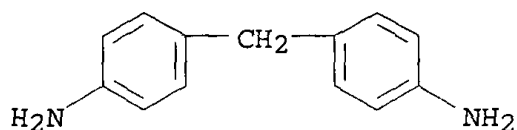
PAGE 2-A



RN 104425-98-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 4,4'-methylenebis[benzenamine]
 (9CI) (CA INDEX NAME)

CM 1

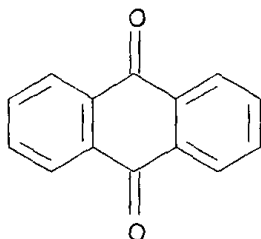
CRN 101-77-9
 CMF C13 H14 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



IT 65680-91-3P 65680-97-9P 65681-01-8P
 65681-04-1P 104389-27-7P 104389-28-8P
 104425-98-1P
 (prepn. and elec. cond. of (Erratum))

L54 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1989:95939 Document No. 110:95939 On the thermal stability of some new polyazines and polyazomethines. II. Dumitriu, M.; Daringa, M.; Pastravanu, M.; Dumitriu, C.; Lixandru, T. (Dep. Org. Macromol. Chem., Polytech. Inst. Jassy, Iasi, Rom.). Thermochemica Acta, 134, 177-85 (English) 1988. CODEN: THACAS. ISSN: 0040-6031.

AB Thermal degrdn. kinetics were detd. for the title polymers prepd. from 9,10-phenanthrenequinone, anthraquinone, 1-chloroanthraquinone, or 2-chloroanthraquinone and H2NNH2, OSNNSO, m-H2NC6H4NH2, p-H2NC6H4NH2, or benzidine. The polymers prepd. from arom. amines were stable to .ltoreq.1200.degree. and were more stable than polymers prepd. from H2NNH2 or OSNNSO.

IT 38622-83-2 38814-09-4 65680-91-3
 65680-97-9 65681-01-8 65681-04-1
 (thermal degrdn. kinetics of)

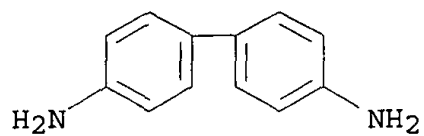
RN 38622-83-2 HCAPLUS

CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine
 (9CI) (CA INDEX NAME)

CM 1

CRN 92-87-5

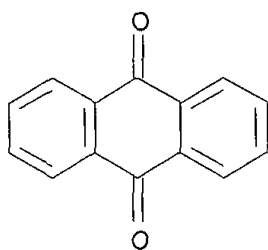
CMF C12 H12 N2



CM 2

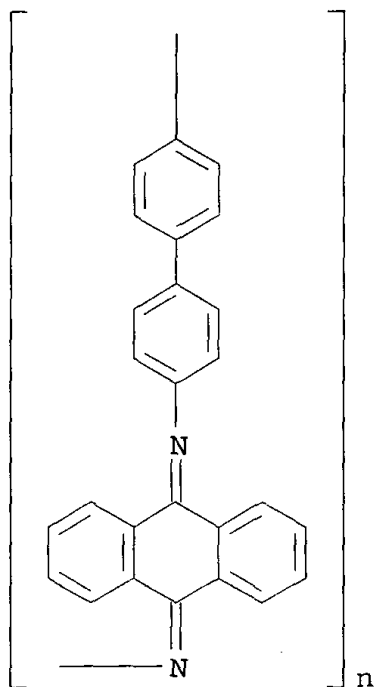
CRN 84-65-1

CMF C14 H8 O2

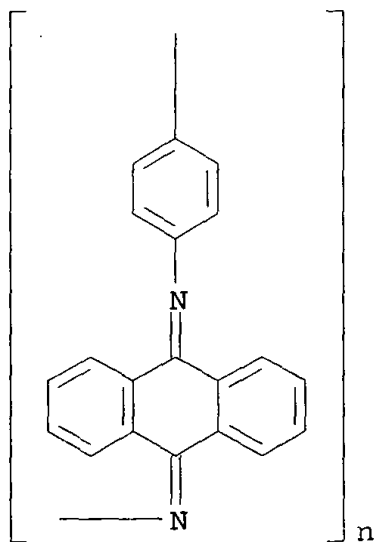


RN 38814-09-4 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-diyl) (9CI) (CA INDEX NAME)

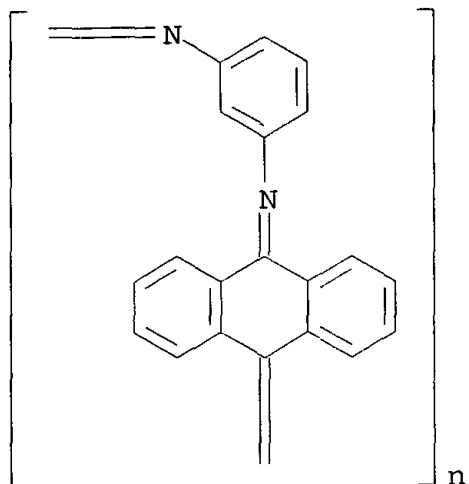


RN 65680-91-3 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
 (CA INDEX NAME)



RN 65680-97-9 HCAPLUS
 CN Poly(nitrilo-1,3-phenylenenitrilo-9,10-anthracenediylidene) (9CI)

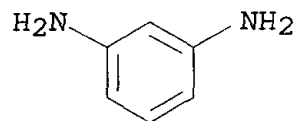
(CA INDEX NAME)



RN 65681-01-8 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,3-benzenediamine (9CI) (CA
 INDEX NAME)

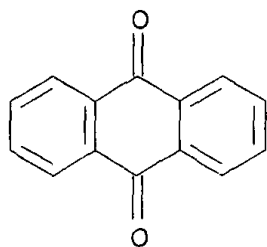
CM 1

CRN 108-45-2
 CMF C6 H8 N2



CM 2

CRN 84-65-1
 CMF C14 H8 O2

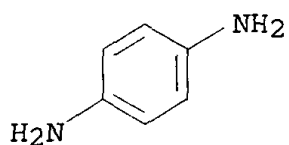


RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

CM 1

CRN 106-50-3

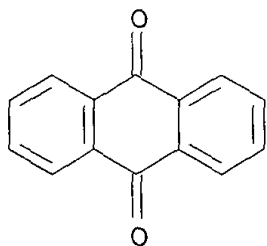
CMF C6 H8 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



IT 38622-83-2 38814-09-4 65680-91-3
 65680-97-9 65681-01-8 65681-04-1
 (thermal degrdn. kinetics of)

L54 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2003 ACS
 1986:534434 Document No. 105:134434 Synthesis and properties of
 semiconducting aromatic polyquinone diimines. Everaerts, A.;

Roberts, Sue; Hall, H. K., Jr. (Dep. Chem., Univ. Arizona, Tucson, AZ, 85721, USA). Journal of Polymer Science, Part A: Polymer Chemistry, 24(7), 1703-16 (English) 1986. CODEN: JPACEC. ISSN: 0887-624X.

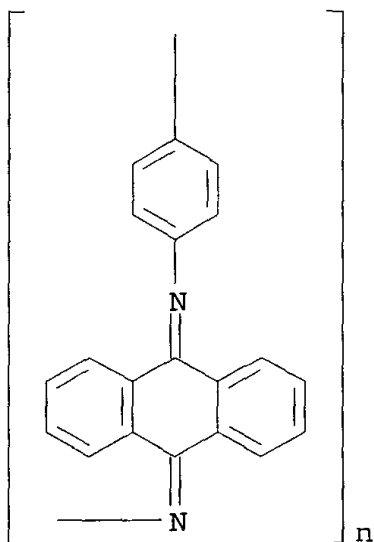
AB Poly-conjugated polymers were obtained by condensation of anthraquinones with arom. diamines in polyphosphoric acid. The polymers were black, intractable powders. Toward obtaining tractable materials, the effect of monomer structure on polymer tractability was studied. Copolymns. were also carried out to "soften" these materials. Elec. cond. in the semiconducting range, 10^{-4} - 10^{-8} (.OMEGA.-cm) $^{-1}$ were obsd. Doping with iodine showed small increases.

IT 65680-91-3P 65680-97-9P 65681-01-8P
65681-04-1P 104389-27-7P 104389-28-8P
104425-98-1P

(prepn. and elec. cond. of)

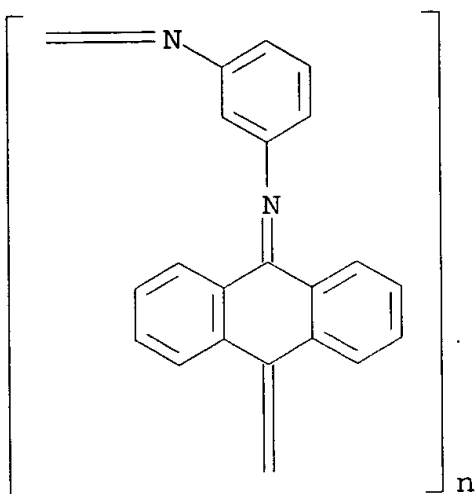
RN 65680-91-3 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
(CA INDEX NAME)



RN 65680-97-9 HCAPLUS

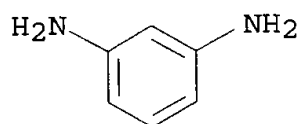
CN Poly(nitrilo-1,3-phenylenenitrilo-9,10-anthracenediylidene) (9CI)
(CA INDEX NAME)



RN 65681-01-8 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,3-benzenediamine (9CI) (CA
 INDEX NAME)

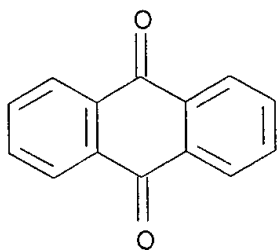
CM 1

CRN 108-45-2
 CMF C6 H8 N2



CM 2

CRN 84-65-1
 CMF C14 H8 O2

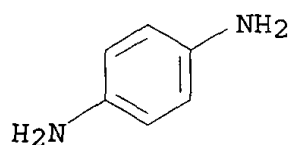


RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

CM 1

CRN 106-50-3

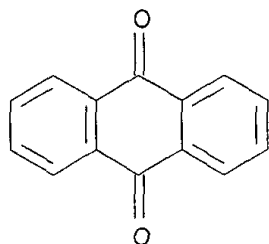
CMF C6 H8 N2



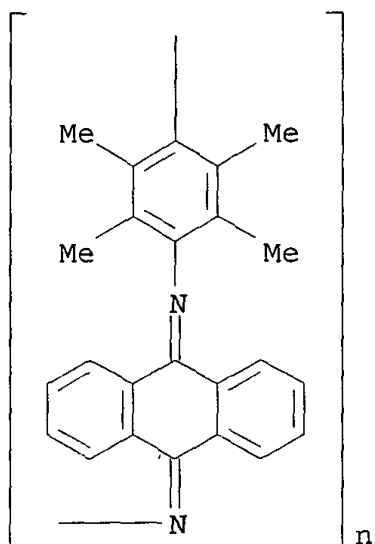
CM 2

CRN 84-65-1

CMF C14 H8 O2



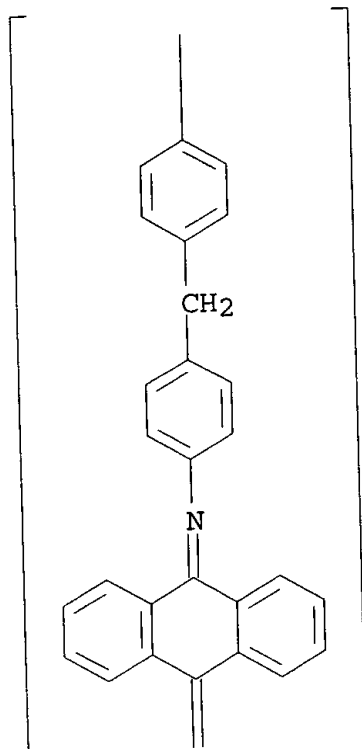
RN 104389-27-7 HCAPLUS
 CN Poly[nitrilo-9,10-anthracenediylidenenitrilo(2,3,5,6-tetramethyl-1,4-
 phenylene)] (9CI) (CA INDEX NAME)



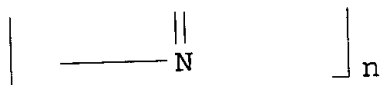
RN 104389-28-8 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylenemethylene-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



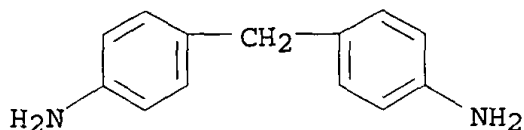
PAGE 2-A



RN 104425-98-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 4,4'-methylenebis[benzenamine]
 (9CI) (CA INDEX NAME)

CM 1

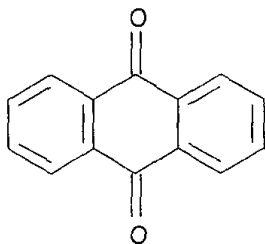
CRN 101-77-9
 CMF C13 H14 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



IT 65680-91-3P 65680-97-9P 65681-01-8P
 65681-04-1P 104389-27-7P 104389-28-8P
 104425-98-1P
 (prepn. and elec. cond. of)

L54 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1980:110271 Document No. 92:110271 Dehydrogenation over poly-Schiff base catalysts. Uehara, Katsuya; Awano, Shigetoshi; Kunugi, Taisei (Fac. Eng., Univ. Tokyo, Tokyo, 113, Japan). Sekiyu Gakkaishi, 22(5), 275-9 (Japanese) 1979. CODEN: SKGSAE. ISSN: 0582-4664.

AB Dehydrogenation of cyclohexene, PhEt, cumene, 1-butene, etc. over 4 different poly Schiff base catalysts was studied in the gas phase using a pulse reactor. The catalysts were prepd. in 116% polyphosphoric acid by polycondensation of benzidine with p-benzoquinone, 1,4-naphthoquinone, 9,10-anthraquinone and anthanthrone.

IT 38622-83-2 38814-09-4
 (catalysts, for dehydrogenation of hydrocarbons and alcs.)

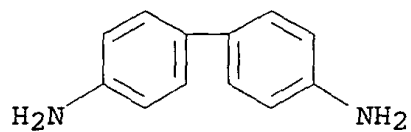
RN 38622-83-2 HCAPLUS

CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 92-87-5

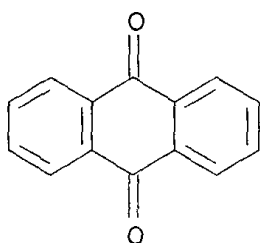
CMF C12 H12 N2



CM 2

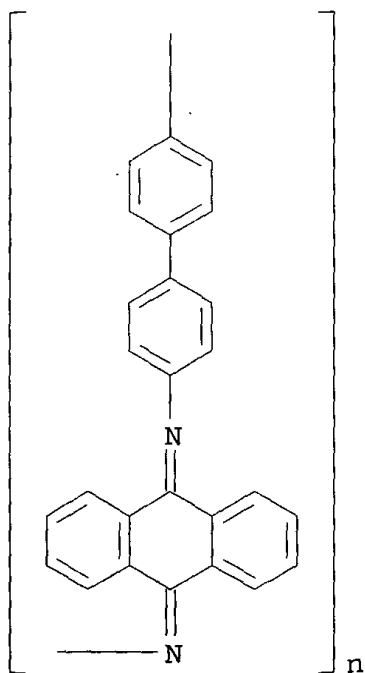
CRN 84-65-1

CMF C14 H8 O2



RN 38814-09-4 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-diyl) (9CI) (CA INDEX NAME)



IT 38622-83-2 38814-09-4

(catalysts, for dehydrogenation of hydrocarbons and alcs.)

L54 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1979:169038 Document No. 90:169038 Studies on organic polymer catalyst. II. Synthesis of poly-Schiff bases in polyphosphoric acid and properties of the polymers. Uehara, Katsuya; Kunugi, Taiseiki (Fac. Eng., Univ. Tokyo, Tokyo, Japan). Nippon Kagaku Kaishi (2), 265-9 (Japanese) 1979. CODEN: NKAKB8. ISSN: 0369-4577.

AB Eight poly-Schiff bases (I) were prepd. by polycondensation of p-phenylenediamine or benzidine with p-benzoquinone, 1,4-naphthoquinone, anthraquinone, or anthanthrone in 116% polyphosphoric acid. The structures of I were verified by a comparative study with a synthesized model compd., elemental anal., and IR and UV spectra. I were stable to 310-500.degree. in air and 400-650.degree. in N. The specific conductance of I were 1.0 .times. 10-5 to 3.8 .times. 10-7 .OMEGA.-1 cm-1 at 200.degree..

IT 38622-83-2P 38814-09-4P 65680-91-3P
65681-04-1P

(prepn. and properties of)

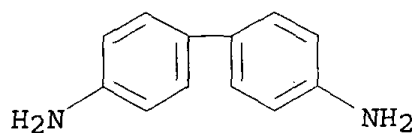
RN 38622-83-2 HCAPLUS

CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine
(9CI) (CA INDEX NAME)

CM 1

CRN 92-87-5

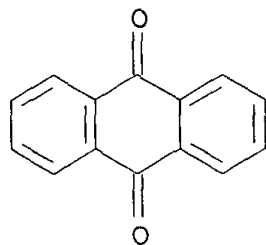
CMF C12 H12 N2



CM 2

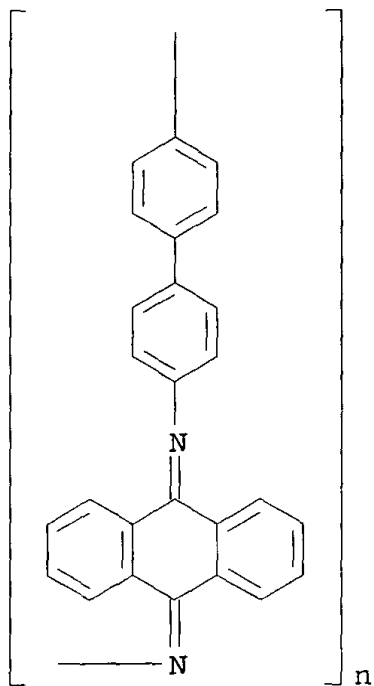
CRN 84-65-1

CMF C14 H8 O2



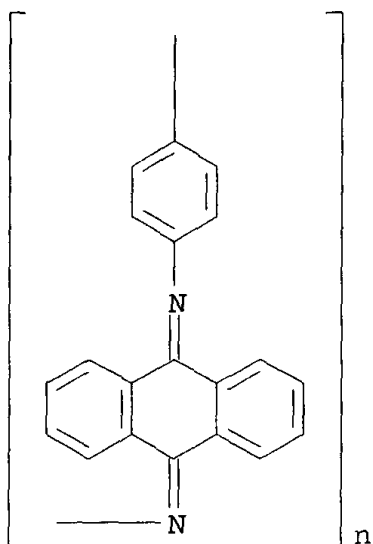
RN 38814-09-4 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-diyl) (9CI) (CA INDEX NAME)



RN 65680-91-3 HCAPLUS

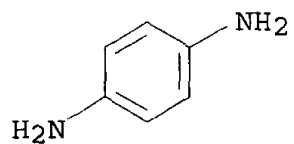
CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
(CA INDEX NAME)



RN 65681-04-1 HCAPLUS
 CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
 INDEX NAME)

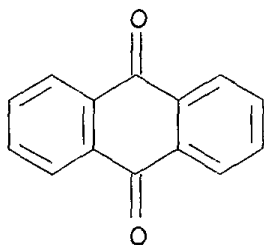
CM 1

CRN 106-50-3
 CMF C6 H8 N2



CM 2

CRN 84-65-1
 CMF C14 H8 O2



IT 38622-83-2P 38814-09-4P 65680-91-3P
65681-04-1P
(prepn. and properties of)

L54 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1978:90074 Document No. 88:90074 Synthesis and study of Schiff base polymers having conjugated electron systems. Dang Dinh Bach; Hoang Thi Phuong; Thai Doan Tinh (Dai Hoc Su Pham Hanoi I, Hanoi, Vietnam). Tap Chi Hoa Hoc, 15(3), 21-5 (Vietnamese) 1977. CODEN: TCHHDC. ISSN: 0378-2336.

AB Schiff base polymers prepd. in 31.65-88.6% yields by condensation of benzidine, m-phenylenediamine, p-phenylenediamine, and 2,4-diaminophenol with anthraquinone, benzoquinone, phthalic aldehyde, and terephthalic aldehyde were obtained in max. yield and with max. viscosity at approx. 100.degree. polymn. temp., were stable to 250-350.degree., and were semiconducting within the range 10⁻⁸-10⁻⁹ .OMEGA.⁻¹ cm⁻¹. The polymers obtained had viscosity 0.38-0.69.

IT 38622-83-2P 38814-09-4P 65680-91-3P
65680-97-9P 65681-01-8P 65681-04-1P
(prepn. and properties of heat-resistant)

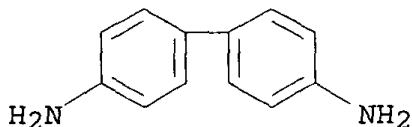
RN 38622-83-2 HCAPLUS

CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine
(9CI) (CA INDEX NAME)

CM 1

CRN 92-87-5

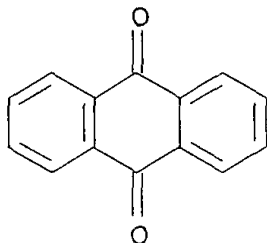
CMF C12 H12 N2



CM 2

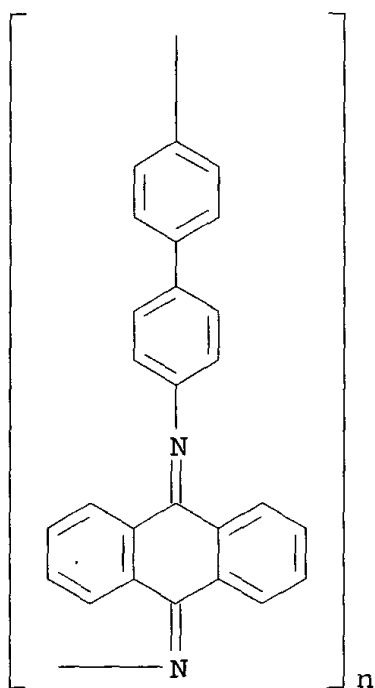
CRN 84-65-1

CMF C14 H8 O2



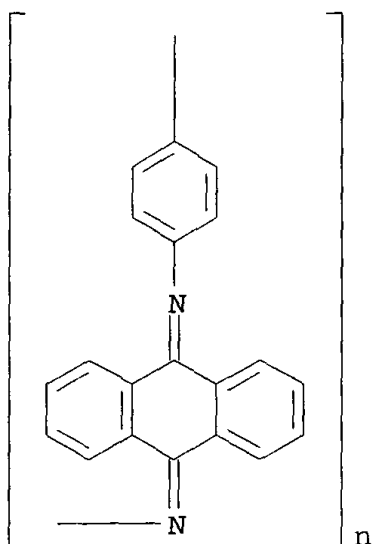
RN 38814-09-4 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-diyl) (9CI) (CA INDEX NAME)



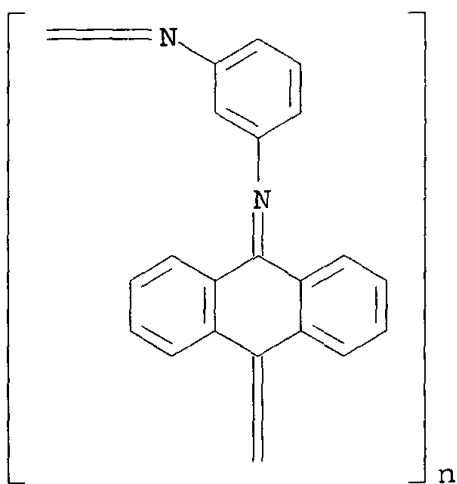
RN 65680-91-3 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-phenylene) (9CI)
(CA INDEX NAME)



RN 65680-97-9 HCAPLUS

CN Poly(nitrilo-1,3-phenylenenitrilo-9,10-anthracenediylidene) (9CI)
(CA INDEX NAME)



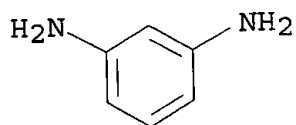
RN 65681-01-8 HCAPLUS

CN 9,10-Anthracenedione, polymer with 1,3-benzenediamine (9CI) (CA
INDEX NAME)

CM 1

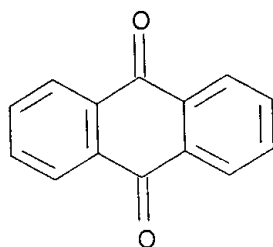
CRN 108-45-2

CMF C6 H8 N2



CM 2

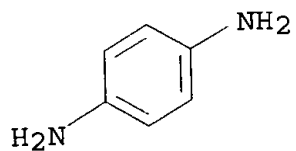
CRN 84-65-1
CMF C14 H8 O2



RN 65681-04-1 HCAPLUS
CN 9,10-Anthracenedione, polymer with 1,4-benzenediamine (9CI) (CA
INDEX NAME)

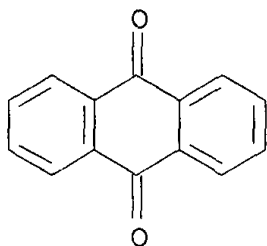
CM 1

CRN 106-50-3
CMF C6 H8 N2



CM 2

CRN 84-65-1
CMF C14 H8 O2



IT 38622-83-2P 38814-09-4P 65680-91-3P
65680-97-9P 65681-01-8P 65681-04-1P
(prepn. and properties of heat-resistant)

L54 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1974:420447 Document No. 81:20447 Isotachophoresis. Phenomena that occur when conductometric detection is applied. Everaerts, F. M.; Rommers, P. J. (Dep. Instrum. Anal., Univ. Technol., Eindhoven, Neth.). Journal of Chromatography, 91, 809-18 (English) 1974. CODEN: JOCRAM. ISSN: 0021-9673.

AB Conductometric detection in isotachophoretic anal. is discussed. Particular attention is paid to the addn. of surface-active compds. which influence electroendosmosis, the electrode reaction, and heat transfer from the electrolyte towards the solid wall. these effects sharpen the recording of the zone boundaries. A method is described for making the measuring electrodes sensitive to singly and doubly charged ions. The application of coatings also sharpens the recording of the electrophoretic anal. The sepn. of SO₄²⁻, ClO₃⁻, CrO₄²⁻, malonate, pyrazole-3,5-dicarboxylate, adipate, OAc⁻, and .beta.-chloropropionate in a model mixt. was studied as an example.

IT 53161-99-2
(electrodes coated with, for cond. detector for isotachophoresis)

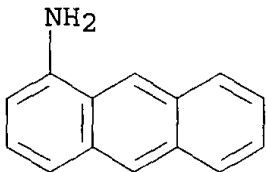
RN 53161-99-2 HCAPLUS

CN 1-Anthracenamine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 610-49-1

CMF C14 H11 N



IT 53161-99-2
(electrodes coated with, for cond. detector for isotachophoresis)

L54 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1973:148284 Document No. 78:148284 Thermal and oxidative thermal degradation of poly(anthraquinonimines). Mezhikovskii, S. M.; Gurov, A. A.; Myagchilova, N. I.; Liogon'kil, B. I.; Berlin, A. A. (Inst. Khim. Fiz., Moscow, USSR). Vysokomolekulyarnye Soedineniya, Seriya A, 15(1), 3-9 (Russian) 1973. CODEN: VYSAAF. ISSN: 0507-5475.

AB The thermal and oxidative thermal degradation kinetics of 6 poly(anthraquinone imines) were studied at 140-900.deg.. The activation energies and reaction orders were detd. for several of the polymers. The highest heat resistance was obsd. in anthraquinone-4,4'-diaminodiphenylethane copolymer [36465-02-8], whereas anthraquinone-benzidine copolymer [38622-83-2] had the lowest heat resistance.

IT 36465-02-8 36483-63-3 38622-83-2
38814-09-4 38814-11-8 38814-12-9
(thermal properties of)

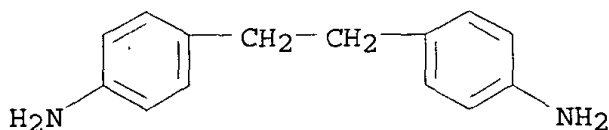
RN 36465-02-8 HCAPLUS

CN 9,10-Anthracenedione, polymer with 4,4'-(1,2-ethanediyl)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 621-95-4

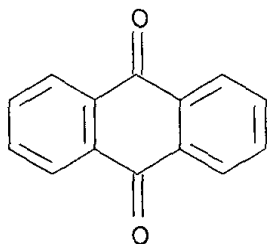
CMF C14 H16 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



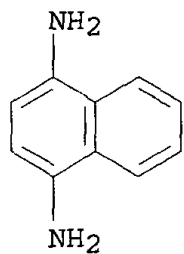
RN 36483-63-3 HCAPLUS

CN 9,10-Anthracenedione, polymer with 1,4-naphthalenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 2243-61-0

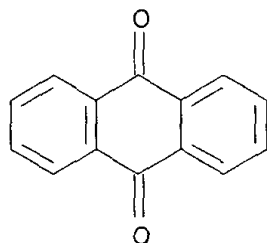
CMF C10 H10 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



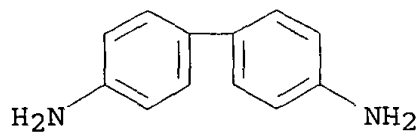
RN 38622-83-2 HCAPLUS

CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 92-87-5

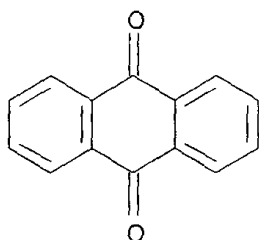
CMF C12 H12 N2



CM 2

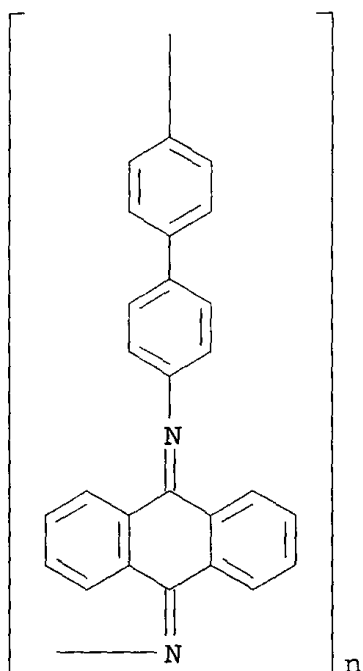
CRN 84-65-1

CMF C14 H8 O2



RN 38814-09-4 HCAPLUS

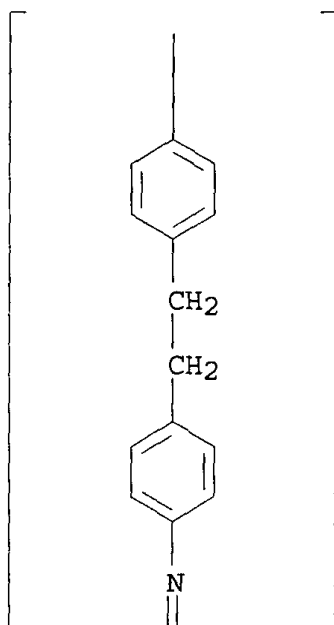
CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-diyl) (9CI) (CA INDEX NAME)



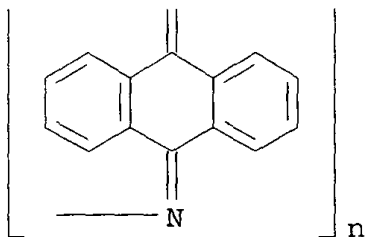
RN 38814-11-8 HCAPLUS

CN Poly(nitrilo-9,10-anthracenediylidene-1,4-phenylenenitrilo-1,2-ethanediyl-1,4-phenylene) (9CI) (CA INDEX NAME)

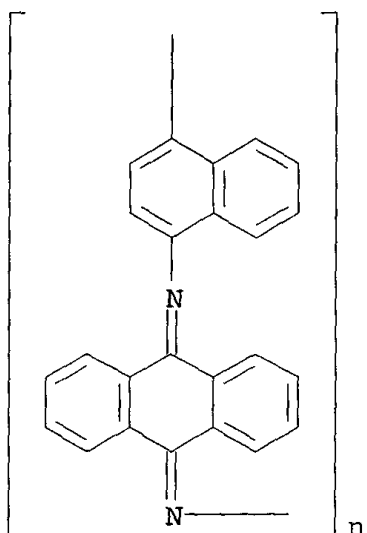
PAGE 1-A



PAGE 2-A



RN 38814-12-9 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-naphthalenediyl)
 (9CI) (CA INDEX NAME)



IT 36465-02-8 36483-63-3 38622-83-2
38814-09-4 38814-11-8 38814-12-9
(thermal properties of)

L54 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2003 ACS

1972:514971 Document No. 77:114971 Poly(anthraquinone imines).
Berlin, A. A.; Liogon'kii, B. I.; Gurov, A. A.; Myagchilova, N. I.;
Dulov, S. M.; Mezhikovskii, S. M.; Abramova, L. A. (Inst. Khim.
Fiz., Moscow, USSR). Vysokomolekulyarnye Soedineniya, Seriya B:
Kratkie Soobshcheniya, 14(6), 441-5 (Russian) 1972. CODEN: VYSBAI.
ISSN: 0507-5483.

AB Poly(anthraquinone imines), e.g. anthraquinone-1,4-
naphthalenediamine copolymer (I) [36483-63-3] and its
analogues obtained from diamines $H_2NC_6H_4XC_6H_4NH_2$, where $X = O, S, SO_2,$
 CH_2CH_2 , or a chem. bond, were obtained by condensation of the
monomers in polyphosphoric acid. I and anthraquinone-4,4'-
ethylenedianiline copolymer [36465-02-8] were most
resistant to thermal and thermal oxidative degradation. A relation
between the structure of the copolymers and their elec. properties
was established.

IT 36465-02-8P
(prepn. of)

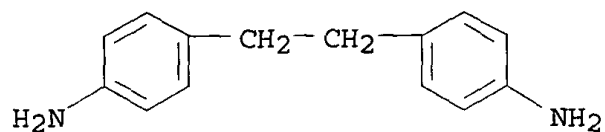
RN 36465-02-8 HCAPLUS

CN 9,10-Anthracenedione, polymer with 4,4'-(1,2-
ethanediyl)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 621-95-4

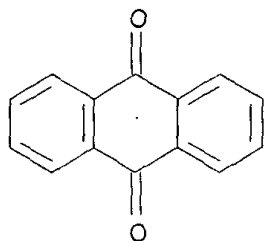
CMF C14 H16 N2



CM 2

CRN 84-65-1

CMF C14 H8 O2



IT 36483-63-3P 38814-11-8P 38814-12-9P

(prepn. of, thermal stability and structure-elec. properties relations of)

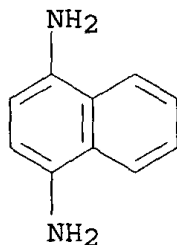
RN 36483-63-3 HCAPLUS

CN 9,10-Anthracenedione, polymer with 1,4-naphthalenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 2243-61-0

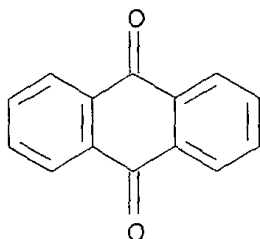
CMF C10 H10 N2



CM 2

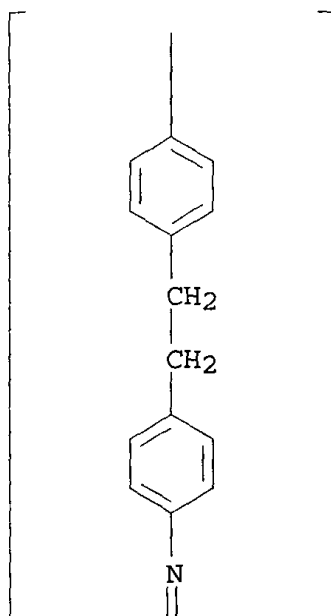
CRN 84-65-1

CMF C14 H8 O2

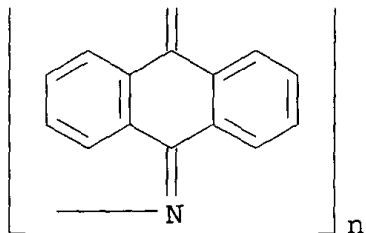


RN 38814-11-8 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidene-1,4-phenylenenitrilo-1,2-ethanediyl-1,4-phenylene) (9CI) (CA INDEX NAME)

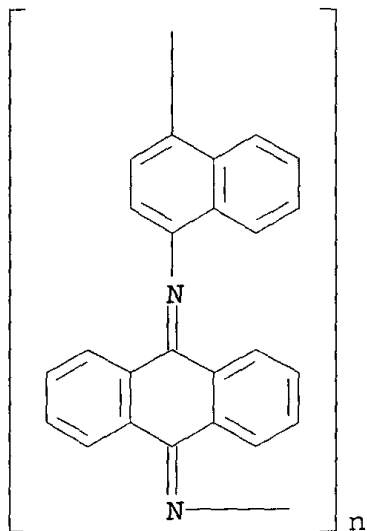
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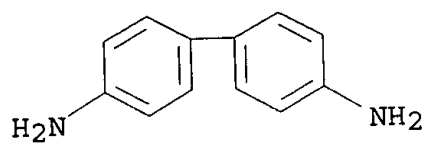
RN 38814-12-9 HCAPLUS
 CN Poly(nitrilo-9,10-anthracenediylidenenitrilo-1,4-naphthalenediyl)
 (9CI) (CA INDEX NAME)



IT 38622-83-2P 38814-09-4P
 (prepn. of, thermal stability and structure-elec. property
 relationship for)
 RN 38622-83-2 HCAPLUS
 CN 9,10-Anthracenedione, polymer with [1,1'-biphenyl]-4,4'-diamine
 (9CI) (CA INDEX NAME)

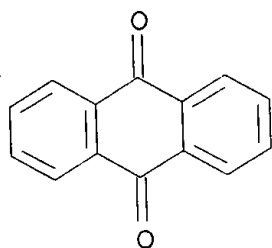
CM 1

CRN 92-87-5
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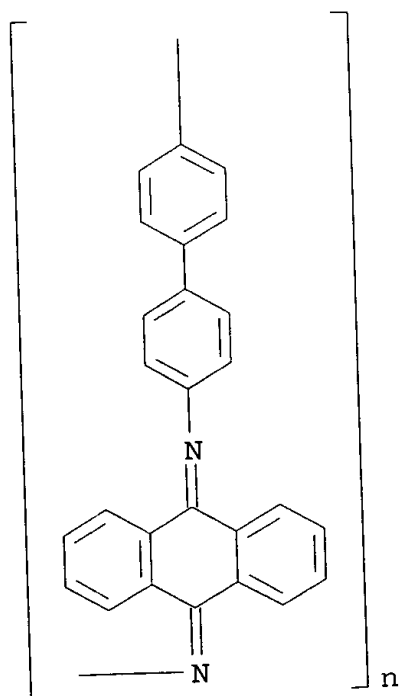


CM 2

CRN 84-65-1
CMF C14 H8 O2



RN 38814-09-4 HCAPLUS
CN Poly(nitrilo-9,10-anthracenediylidenenitrilo[1,1'-biphenyl]-4,4'-
diyl) (9CI) (CA INDEX NAME)



IT 36465-02-8P
(prepn. of)
IT 36483-63-3P 38814-11-8P 38814-12-9P
(prepn. of, thermal stability and structure-elec. properties
relations of)
IT 38622-83-2P 38814-09-4P
(prepn. of, thermal stability and structure-elec. property
relationship for)